

Parenting and post-separation contact: what are the links?

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Editorial note

Policy at the LSE and an Associate of CASE. Tina Haux is Lecturer in Social Policy at the University of Kent. Rachel Rosenberg is Research Data Manager at the Centre for Longitudinal Studies, UCL Institute of Education.

The research project made use of surveys 1-5 of the Millennium Cohort Study (www.cls.ioe.ac.uk/mcs) and was accessed from the UK Data Archive. We are grateful to The Centre for Longitudinal Studies at UCL Institute of Education for the use of these data and to the UK Data Archive and Economic and Social Data Service for making the MCS data available. However, they bear no responsibility for the analysis or interpretation of these data.

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Abstract

High rates of parental separation and the extent to which non-resident fathers lose contact with their child have led to concerns about the involvement of fathers in their children's lives. In this paper, we draw on a nationally representative study of children born in 2000-2001 in the UK to provide an original analysis of the relationship between pre-separation fathering and post-separation contact. We provide new insights into the drivers of post-separation contact and the extent to which such post-separation contact represents a continuation of pre-separation fathering practices. We find that fathers who were more active parents prior to separation tend to have more frequent contact after separation. Nevertheless there is still a tendency, even among more involved fathers, to reduce or lose contact over time.

Key words: parenting, fathers, father involvement, separation, child contact,

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1. Introduction

In the UK large numbers of children are not growing up living with both their parents, and separation is affecting them at younger ages. In 2010, around half of all divorcing couples had at least one child under 16 and of all children under 16 affected by divorce that year, a quarter were under five (ONS, 2011). At any one point, a quarter of all families with children are headed by a single parent (ONS, 2012) and it has been suggested that just under half of all children born today will experience parental separation before they reach adulthood (Centre for Social Justice, 2012). With one in ten fathers losing contact with their child after a separation (Poole et al. 2013), and substantial research into the potential negative effects of separation on children's outcomes (Mooney et al. 2009), the continued involvement of non-resident parents in their children's lives is salient policy topic. However, there is little research on the extent to which a father's contact post-separation represents a continuation of his pre-separation involvement in the child's life, and none that uses nationally representative data with parenting measured before and contact measured after separation.

In this paper, we exploit a longitudinal nationally representative data set of children born in the UK in 2000-2001 to uniquely address the links between pre-separation fathering and post-separation contact. Using data collected in five surveys of the Millennium Cohort Study across the first 10 years of the children's lives, we estimate the association of pre-separation fathering with post-separation contact patterns for a sample of around 5,000 observations on over 2,000 fathers. Using information they provide on their parenting while they are still living with the child and mothers' report of the contact they maintain after they leave the family home, we investigate three contact outcomes and four measures of pre-separation parenting. We also take account of other factors we expect to influence levels of contact following a split, specifically the time since the separation, socio-economic position of the family and father's educational, health and work status. We find a positive association between more involved fathering prior to separation and more frequent contact after a split, though there is some variation according to the parenting measure and the type of contact outcome. We also find that time since separation decreases contact, while those who separate when their child is older have higher levels of contact, other things being equal.

2. Background

2.1 *The impacts of separation*

There is longstanding debate about the extent of negative effects of separation on child outcomes (Bernardi et al. 2013). Such families have been referred to as 'broken families', who are seen as forming the core of the 'broken society' (Centre for Social Justice 2007; see also Murray 1984). Alongside factors such as parental conflict and maternal mental health, quality of parenting is regarded as a key factor determining the impact of separation on children (Mooney et al. 2009; see also Amato 2010). On-going parental contact post-separation is generally perceived to be beneficial and in

the interest of all concerned; but at least one in ten non-resident parents do not have contact with their children (Poole et al., 2013). Successive UK governments, concerned with the impact of separation on children, have been trying to cement parental involvement after separation. For example, the Family Justice Review (Cm8273, 2012) placed fresh emphasis on shared parenting. The research base, however, suggests that the benefits of contact with the non-resident parent are more contingent. A review of the evidence from four countries (Hunt and Roberts 2004) suggests that there is no linear relationship between the quantity and the quality of contact, that the nature and quality of contact matter rather than the existence of contact in itself, that contact is beneficial only for the children involved if it takes place within a set-up of co-operative post-separation parenting and, finally, if there are no concerns over the safety of either one of the parents or the children. A more recent review (Bernardi et al. 2013) also suggests substantial ambiguity in the findings relating to ongoing paternal involvement in parenting. While the results from joint custody arrangements are more positive, there is a strong degree of selection into such arrangements.

Research on separated families with children finds that on-going contact is facilitated or inhibited by a number of factors: whether the children involved want contact, the nature of the break-up, whether there is co-operative post-separation parenting from both parents, socio-economic status of parents, geographical proximity, re-partnering of the non-resident parent, child support payments, and whether or not there are additional siblings or new births (Hunt and Roberts, 2004; Hunt 2003; Lader, 2008). Additional factors implicated in contact patterns are maternal gatekeeping and the age of the child at separation, which is linked to the child's ability to initiate or control contact.

Research based on the US Fragile Families Study¹ suggests that positive co-parenting (defined as having consistent approaches to parenting) between separated parents was a strong predictor of future contact with the child (Carlson et al, 2008). However, the study focuses only on non-resident parents; while Carlson and Hoegnaes (2010) expand the evidence on co-parenting to co-resident parents, but do not make the connection between the two. By contrast, Carlson et al. 2011 focuses on co-resident couples and finds an association between relationship quality and parental engagement, with better relationship quality predicting parental engagement, especially in the very early years. However, these studies do address the association between pre- and post-separation behaviours.

¹ It is important to highlight both the similarities and differences between the two studies. The most significant are that like the MCS, Fragile Families is a cohort study starting around the birth of children. However, unlike the MCS, Fragile Families is not based on a representative cross-section of parents having children at that point in time. Instead, it deliberately sampled mothers who were not married at the time of giving birth, therefore capturing a particular sub-group of the population as whole.

While some studies have focused on the relationship between the couple and parenting others have addresses the emotional bond between parent and child, and its persistent across separation. Fortin et al. (1988) in a UK study of adults whose parents had separated while they were children, argue that:

One of the most striking findings of the study was the importance of the pre-separation relationship between the child and the parent who subsequently became non-resident. Where relationships had been very close, contact was most likely to be both continuous and a positive experience for the child. The foundations of successful contact, then, are laid down pre-separation. (Fortin et al. 1988, p.xii).

However, this retrospective study was susceptible to potential reporting bias of adults who had experienced continuous and positive contact as a child. Bernardi et al. (2013) summarise a series of studies indicating that the quality of contact between non-resident fathers and their children have a bearing on the relationship between contact and child outcomes. But, again, these studies are not able directly to inform us about the continuity of parenting evaluated before separation with that after separation.

2.2 *Fathering*

In most cases, of course, it is the father who becomes the non-resident parent post separation. Over the past decade a substantial body of research has been amassed on fathers and fathering. Relevant to this research is the finding that fathers are spending more time with their children, especially if they are under 5 years old, evidence of ‘weekend catch-up’ where one or both parents are working, as well as of fathers being more likely to take sole responsibility for a child if they have atypical working patterns and are therefore at home for a day or more during the week (Hooke and Wolfe, 2012). In other words, there is a clear link between the work hours and patterns of fathers and the amount and kind of caring activities for their children they undertake, as well as a general increase of father involvement. Yet, while there has been a clear shift away from the breadwinner as the main role of fathers to being an ‘involved father’, being in work is still a key part of men’s identity (Dermott, 2008). The development has been summarised as ‘growing gender convergence, but not equity, in parents’ contributions to childcare in the UK’ (O’Brien, 2006, p. 7).

LaRossa (1988 in Dermott, 2003) identifies a gap between the ‘culture’ and ‘conduct’ of the ‘new father’. That is, the ideas and beliefs about fathering seem to have changed more than the actual behaviour. However, it is less clear whether this gap between culture and conduct is due to a lag between expectations and practices, societal constraints, particularly, around paid work, or to maternal gatekeeping (Dermott, 2003). The emphasis on quantity of parental engagement, it is suggested, needs to take account of the quality, even if capturing this presents additional challenges.

In terms of measuring paternal involvement, a number of different interpretations of fathering are presented in the literature. For example, for Lamb et al, fathering is

about engagement, accessibility and responsibility (Lamb et al., 1987 in Marsiglio et al., 2000). Others have distinguished primary, secondary and passive parenting, where primary parenting refers to direct activities with the child, secondary parenting to watching the child while engaging in other activities such as housework, and passive parenting to watching children involved in activities such as swimming classes, as well as sole parenting as having full responsibility for the child (discussed in Hook and Wolfe; 2012). An additional dimension is ‘intimate fathering’ including emotional openness, communication and a close relationship with children (Dermott, 2003). Kiernan and Mensah (2010) compiled an index of parenting that included the frequency of educational activities with the child, relationships of the parents with the child, the social networks of parents and children, physical care, routine for the children and disciplining (cf. Ermisch 2008). However, aggregate measures may combine distinct aspects of parenting that have different implications for future relationships.

The parenting of non-resident fathers can also comprise different dimensions. One common distinction is between resources (financial support) and time (contact) (Thompson et al. 1994), even if these are also likely to be implicated in each other (Ermisch 2005). However, forms of contact can also vary in ways that have implications for the quality of the relationship and its sustainability (Bernardi et al. 2013).

2.3 *Contribution of the study*

Our UK study is, to our knowledge, the first largescale nationally representative study that addresses the potential association between parenting (specifically fathering) measured before separation and the extent of contact subsequently maintained after separation. While we might expect that fathers who are more involved with raising their children are more likely to stay in touch, we do not yet have clear evidence on whether this actually occurs in practice, how it varies across forms of paternal involvement, as well as the extent to which other structural and behavioural factors influence or mediate the continuity of contact between children and their non-resident parents.

We therefore investigate a number of aspects of father’s pre-separation involvement in their children’s lives, their active parenting, the extent to which they look after the child on their own, the closeness to the child and their perceived parenting competence, all of which, we argue, may augur greater degrees of contact post-separation. We also test the relationship of these various aspects of parenting with different dimensions of contact. Given the concerns around loss of contact we measure the chances of maintaining any, as opposed to no contact, but we also look at contact frequency as a more differentiated aspect of contact. Since overnight stays are an intrinsic part of the conceptualisation of shared parenting, we investigate the frequency of overnight stays, conditional on contact.

We recognise that father’s post-separation contact is unlikely solely to be influenced by his pre-separation parenting and involvement with the child. We factor in a range

of other pre-separation contextual factors that are likely to influence the degree of contact, in particular, the circumstances of the father and the socio-economic resources of the family, as well as the timing of the separation and the age of the child. An important element of our approach is to separate out factors that preceded separation from those that might have been influenced by the conditions or experience of the separation itself.

Overall, drawing on existing literature, we expect

1. That contact with their child is more likely to take place, likely to involve more frequent and, conditional on contact, will involve more overnight stays where the father has been more involved in the raising of the child, has already had regular experience of time alone with the child, feels closer to the child, and is more confident about their parenting.
2. However, we also expect that frequency of contact will decline (and non-contact increase) with time since separation, but that this will be less the case for more involved fathers.
3. We anticipate that, other things being equal, fathers will have more contact with older children
4. Just as we expect that fathers will engage more with older children, we also expect that girls and boys may interact differently with their fathers and have different expectations placed on them in terms of contact. Hence we expect that, while having contact at all will not vary with sex, boys will have greater contact frequency with their fathers, and also, greater frequency of overnight stays. We expect that this will be partly, but not wholly driven by the degree of pre-separation involvement.
5. Father's personal resources will influence the possibilities for contact, in particular, his health status is likely to constrain his ability to maintain regular contact, independently of his parenting involvement.
6. We anticipate that family economic resources will shape patterns of contact, but controlling for these we will still observe greater levels of post-separation contact among those fathers who were more involved prior to separation.

In the analysis we test whether these expectations are empirically supported using the uniquely rich and apt resource for this study, the Millennium Cohort Study (MCS). In the next section we describe the MCS in more detail and specify the variables and samples used in our analysis. In the following sections we provide descriptive analysis of contact patterns, followed by multivariate analysis that investigates the continuity of parenting pre-and post-separation more systematically.

3. Data and methods

3.1 Data

The Millennium Cohort Study (MCS) is a UK-wide cohort study of around 19,000 children born to families resident in the UK between September 2000 and January 2002. The MCS employed a stratified clustered sampling design to ensure an adequate representation of all four UK countries, disadvantaged areas, and ethnic minority groups (Plewis 2007). The original cohort (MCS1) comprised 18,818 children whose parents were first interviewed at home when their child was aged around nine months. Four further surveys have been completed when the cohort children were aged around three, five, seven, and 11 years old. At each of these surveys the main carer (typically the mother) and their co-resident partner (typically but not always the father) were interviewed and completed a short self-completion questionnaire. From age 3, information was also collected directly from the child in the form of physical measurements and cognitive assessments. From age 7, in addition the cohort children completed their own (age-appropriate) questionnaire. Information has also been collected from teacher surveys at the age 5, age 7 and age 11 survey; and, for those families consenting, children's records have been linked to educational records. In this paper we use data from all five surveys, drawing on information collected in the main parent interview (and self-completion) and the partner interview (and self-completion) (University of London 2012a; 2012b; 2012c; 2012d; 2014).

The MCS carries a detailed range of questions on parenting activities, capabilities, co-parenting and contact and, being a cohort study, the nature of the questions relating to parental involvement with the child change with the age of the child. Questions are asked of both parents – though not always precisely the same questions of each. This allows for age-appropriate measures of parenting to be investigated across the life of the survey and for the partner's (father's) own report of his parenting and engagement with his child prior to separation to be exploited without being confounded by the attitude or perspective of the main parent (mother). Nor is it subject to potential recall bias or the nature of post-separation family contact.

On the other hand, upon separation, the MCS does not follow the parent leaving the household. Therefore, any information about the non-resident parent is collected from the resident parent. This is potentially problematic for our study if information about the frequency of contact between the non-resident and the cohort child is misreported in ways that are related to prior parenting behaviour by the absent parent, since this would bias our estimates. A UK survey of parents suggests parents with care may report different levels of contact, with non-resident parents generally reporting higher levels of contact (Lader, 2008). However, in that study the resident and non-resident parents were independent samples, so it was not possible to identify if the reports of contact relating to any given child were correlated across parents. We make the assumption that while there may be some under-reporting of the precise levels of contact the reports are correlated with the father's actual contact patterns and do not vary systematically with our key measures of interest, namely father's pre-separation parenting, once adjusting for relevant control variables. If a mother's report of contact

is higher where parenting quality of the father was higher (or conversely lower where the father was less involved), then our estimates will represent upper bounds. On the other hand, it may be that contact is more salient for mothers – and therefore over-reported – where fathers were *less* involved prior to separation, in which case our estimates would represent lower bounds of the effects of pre-separation parenting.

3.2 *Sample*

We focus on those families where the parents were living in an intact relationships when the cohort child was an infant (around nine months old), and where the mother was the main respondent (and the father the partner respondent), excluding those small number of cases where someone other than the mother was the main respondent at the initial survey. We also exclude those nearly 3,000 cases where the parents were never co-resident or had already separated by age nine months as they provide us with no information on the father's pre-separation parenting. We also exclude those cases where the mother switched from being the main carer at subsequent surveys, to ensure continuity in the information provided (since the partner questionnaire only includes a subset of the information asked of the main parent). This gives us a sample of around 14,600 families at the first (age 9 months) survey. The MCS includes a small number of twins and triplets who we exclude from the analysis as the factors linked to parenting and partnership dissolution are likely to differ for these cases (217 families). We also exclude those small number of cases where the father was known to have subsequently died (a further 91 cases). This gave a sample of 14,329 singleton MCS children living with both parents at age nine months. In this paper, we focus on the subsample of 2,758 families who are observed to have experienced a separation at one of the subsequent surveys. Of these, 795 experienced separation between age 9 months and 3 years; 767 between 3 and 5 years; 476 between 5 and 7 years, and 720 between 7 and 11 years. Note that the gap between the last two surveys was four years rather than two years, and therefore we might have expected an increase in separations since the previous survey even if the rate per year had reduced by this point.

In the descriptive analysis we explore the patterns of contact both for each set of between-survey separations. Given some missing data on our key outcome variables our final samples for analysis of contact relating to separations taking place between successive surveys are 787, 745, 456 and 715, as shown in Table 2, with overnight stays conditional on contact giving samples of 633, 642, 415 and 635.

In the multivariate analysis, we test associations using a pooled sample that incorporates all of the separated families and the information on contact that they provide at all post-separation surveys for which they are observed. This gives a pooled sample of around nearly 5,000 family-survey observations (from around 2,235 families) for whom we have a full set of covariates for analysis of contact and contact frequency and around 3,500 family-survey observations (from around 2,000 families) with information on overnight stays conditional on contact. However, given not all of our key dependent variables were asked in all surveys the precise sample sizes vary for particular analyses. Sample sizes are also slightly reduced by missing data on the various covariates for each of the specific analyses.

In this pooled sample, we estimate the association between pre-separation variables and post-separation contact not only at the point of separation but also for each subsequent survey at which they were observed, allowing us to fully take account of the influence of time since separation in shaping contact patterns, once controlling for child's age. For example, where parents separated between age 3 and age 5, we use information on post-separation contact at ages 5, 7 and 11, where available.

We use the parental and parenting information from the survey that immediately preceded the separation, while our measures of time since separation and age of child are evaluated at the point the contact outcome is measured. The resulting samples and sizes are summarised in Table 1.

3.3 Outcomes

Our three outcome variables are contact failure, contact frequency and overnight stays. These capture three critical elements of post-separation contact, i.e. whether it breaks down altogether, the intensity of the contact, captured by its frequency, which is likely to reflect how positive and sustainable the relationship is; and the frequency of overnight stays, which is taken to be a relevant indicator of 'shared care'.

Contact is asked at every survey but the wording changes.² At age nine months and 3 years the main contact questions refers to contact between the parents ('Do you have any contact now with [child's] father?'). It changes from age 5 onwards to asking about the contact between the NRP and the child ('I'd like now to ask you about absent parent] who no longer lives here. Does [child] have any contact now with absent parent]?'). However, the answering options are the same for both wordings, namely a straightforward yes/ no. We code yes as 1 (any contact) and no as 0 (no contact).

If the respondent answers yes to the first question on contact, she (in our sample) will then be asked about the *frequency of contact* ('How often does [absent parent] see [child]?'). The seven response options are Every day / 5-6 times a week / 3-4 times a week / Once or twice a week / Less often but at least once a month / Less often than once a month / Never. We reverse code frequency of contact so that a higher value reflects a greater frequency, and we included with the 'never' category all those who answered 'no' to the contact question.

From the age 5 survey onwards, respondents are asked whether the child *stays overnight* with their absent parent and if so, how often. Answer categories cover

² The question capturing any contact at all is not specific regarding whether this is direct or indirect contact while the question capturing contact frequency does refer to direct contact in later sweeps. According to a previous survey there is little difference in the rates of direct and indirect contact (Lader 2008) but it is not clear whether this is because the same non-resident parents have both direct and indirect contact or whether the proportion who have either is similar. In any case, one would expect this ambiguity across the questions to be more important in later sweeps, when the cohort child is older and has greater access to independent means of communication such as a mobile phone.

whether this happens ‘often / sometimes / rarely / never’, which we again reverse code so that a higher value reflects a greater frequency. While this is only measured from the age 5 survey, we would also expect the relevance of this measure to become more relevant and increase with the age of the child.

3.4 *Explanatory variables*

We set out to capture whether the level or nature of contact is influenced by father’s prior involvement, as well as key characteristics of the child (age and sex), father’s characteristics and pre-separation family context. In all cases the explanatory variables are measured prior to the separation to avoid issues of reverse causality. In most cases the measure is taken from the survey immediately prior, but in some cases it is taken from an earlier survey (in cases where it was not asked immediately prior or where it is a stable measure (such as age at birth of the child or academic qualifications) that come from the first (age 9 months) survey.

Father’s parenting

Our key interest is whether more involved fathers prior to separation show greater engagement with their child (less contact failure, higher frequency of contact and more overnight stays) post-separation. We use four measures to capture different, potentially relevant aspects of the father’s parenting and involvement with his child.³ While the first two measures provide us with assessments of parenting across all surveys, the second two are only asked at specific surveys and thus we have a reduced set of cases we can explore in relation to these measures (as shown in Table 1). Unlike indices that combine different aspects of parenting, these measures capture distinct domains that may be relevant to post-separation contact and are therefore worth considering separately.

To measure father’s *parenting involvement* we employ a composite index of parenting activities, summarising father’s (age-specific) involvement with the child prior to separation. At age nine months our composite variable of paternal involvement includes frequency of nappy changing, feeding and getting up in the night by the father. The answer options for all three questions are the same and as follows: More than once a day / Once a day / A few times a week / Once or twice a week / Less than once a week / Never. At age three father’s involvement is measured on the basis of the frequency of getting the cohort child ready for bed and of reading to the child. At ages five and seven father’s involvement is based on measures of the frequency of reading to and putting the cohort child to bed plus frequency of telling stories, singing or

³ In additional analysis (not shown) we tested whether the relationship between involvement and contact was a spurious one driven by the relationship quality between mother and father (as reported by the father), but we found no evidence that this was the case, and relationship quality had no impact on the models. Therefore, for parsimony we did not include relationship quality in the models, since our focus was on the father-child relationship. (Additional estimates available on request.)

making music, of drawing, going to the park, playing physically active games and frequency of playing with toys.

Whether the father *looks after the child by himself* is included as a separate measure as it is qualitatively different according to the literature on fathers and parenting more generally. It is asked at all surveys: 'First, how often do you think you look after [child] on your own?'. However, even though the question stays the same the answering categories differ at the second, age 3 survey. At all other surveys the answering categories are the same as for the other father activity questions, i.e. More than once a day/ Once a day / A few times a week / Once or twice a week / Less than once a week / Never. However, at age 3 the answering categories were collapsed and named as: Never or almost never/ Sometimes/ Usually/ Always. In order to make the variable comparable over time, we have recoded the answers for from the age 3 survey to harmonise with those categories available at the other surveys ('usually' being allocated to 'a few times a week', 'sometimes' to 'less than once a week' and 'never or almost never' to 'never'). The values are coded from less to more often, given the predicted positive relationship with contact.

We also measure whether the father *feels close to the child*; and how competent he feels as a parent. Closeness is measured at ages 5 and 7 (surveys 3 and 4) by the question, 'Overall, how close would you say you are to [child]?' with responses ranging from 'not very', through 'fairly' to 'very' to 'extremely' close. Given the small number of responses to 'not very', we have collapsed these with those to 'fairly'. Since it was not asked at the first two surveys we can only use it for analysis of later separations, hence reducing sample size and range of children's ages covered for this measure.

Father's parenting competence is measured at ages 3 and 5 (surveys 2 and 3) as follows 'The next question is about how you feel about being a parent. For the next statement, choose your response from the choice 1 to 5: I feel that I am: 1 Not very good at being a parent; 2 A person who has some trouble being a parent; 3 An average parent; 4 A better than average parent; 5 A very good parent; 6 Can't say'. We collapse this into a 3-category variable, excluding the c. 1 per cent of respondents who 'can't say', and use the measure from the survey that most closely precedes the time of separation.

Time since separation

We also anticipated that time since separation would have a negative impact on father's level of contact, other things being equal and we have constructed a detailed measure of time since separation in months, from the relationship history questions asked of the mother at each survey.

Child's characteristics

As discussed, we expect the nature and frequency of contact to be influenced by the age of the child. We use a measure of *child's age* in years and fractions of years,

which is centred at the median age for the pooled sample (c 5 years) to adjust for child's age. We also include *child's sex*, coded 1 for a girl and 0 for a boy.

Paternal characteristics and family context

As discussed in the introduction, the socio-economic characteristics of the parents are likely to affect contact patterns post separation. Therefore, we expect that father's ability to maintain contact will be influenced by his own characteristics and constrains as well as the family context prior to separation. In terms of his own characteristics, health has been identified as relevant and we include a measure of *long-term limiting illness* that takes the value of 1 if the father reported a long-term health condition that limited his daily activities and 0 otherwise.⁴ From existing research, we expect that father's contact may also be influenced by his *employment* and *educational status*, and pre-separation family context, which may shape both opportunities for contact and be linked to prior parenting (see Lader 2008 among others). We therefore include measures of father's qualifications level at the initial survey coded from 0 (no qualifications) through 1, lower than good GCSE (or equivalent), 2 good GCSE or post-secondary (A' levels) and 3 tertiary qualifications. We also include a measure of whether he was in employment prior to separation, coded 1 if he was not and 0 otherwise. As a further control we include his *age* at the first survey (centred around the mean age of all fathers). Father's involvement may also be constrained by the opportunities for entertaining the cohort child and having them stay over offered by reduced economic position (see review by Hunt 2004). For this reason, as well as a measure of *family economic circumstances* prior to separation (banded household income, in decile groups coded from 1 to 10), we also include a dummy variable for the child's *residence in London*, given the pressure on housing space in London, the high costs of housing, which may limit a newly separated father's options, as well as the costs of travel and entertainment. Furthermore family context and opportunities for paternal involvement are also likely to be shaped by *mother's work status*, so we also include a measure of pre-separation maternal employment (Norman et al 2014) (coded 0 if she was in work and 1 otherwise) and whether the *mother suffers from a long-term limiting illness*, coded in the same way as for the father.

We also include the number of *older siblings* and whether there were *younger siblings* of the cohort child who were present in the family prior to separation, to capture the extent to which the father was involved in the family prior to the birth of the cohort child and whether there are other children who might influence the level of contact. We include a measure of whether the parents were *married or cohabiting* prior to separation as this has been shown to be a relevant predictor of contact patterns in other research.

⁴ We explored using a measure of the general health instead of long-term illness, but the results were the same.

3.4 *Empirical strategy*

We start with simple description of the evolution of our key independent variables across the survey. Next, we present estimates from a series of models for each of the contact outcomes (any contact, contact frequency and overnight stay frequency), using the pooled samples relevant to the key independent and dependent variables as illustrated in Table 1. We estimate binary logit regressions for any contact, and report average marginal effects to render the estimates more comparable with those from the linear regressions (OLS) that we estimate for contact frequency and frequency of overnight stays.

We present both unadjusted estimates of the relationship of the fathering variable with the contact outcome and fully adjusted estimates (i.e. controlling for all the other explanatory variables).

All estimates account for the complex survey design of the MCS and the initial (first survey) non-response weights. Given that we are including measures from different surveys in the analyses, we cannot use the specific (longitudinal) survey weights to adjust for wave on wave response, but the impact of these weights is rather small, especially relative to the original design effects (see Platt 2014).

Table 1: Analysis samples for pooled analysis: numbers of family-separation waves (families)

	No contact	Contact frequency	Overnight stays, conditional on contact
Fathers: involvement in parenting	4877 (2235)	4874 (2235)	3540 (1957)
Fathers: frequency look after child on own	4878 (2236)	4875 (2236)	3540 (1957)
Fathers: closeness	1034 (808)	1033 (808)	939 (747)
Fathers: competence	2079 (1235)	2077 (1235)	1860 (1150)

Source: MCS, age nine-months, 3, 5, 7, and 11 surveys (University of London 2012a,b,c,d, 2014)

4. Results

4.1 *Contact across the surveys*

Table 2 shows the percentages of children having any contact, their contract frequency and their frequency of overnight stays among those who have experienced the separation of their parents since the last survey. It shows that, among this sample, rates of contact failure are relatively low and decline, as we might expect, when the separation occurs somewhat later in the child's life.

Starting with the loss of contact, this ranges from 17 per cent to seven per cent in the first survey after separation depending on the age of the child at separation. Broadly speaking, it appears that contact is less likely to break down if the child is older when the separation occurs. Loss of contact does not have to be permanent. Rather than being a point of no return a number of fathers regain contact from one survey to the next. (Analysis available on request.)

Around 25 per cent of fathers see their child multiple times (at least 3-4 times) during the week, rising to over 30 per cent of fathers by the time the child is aged 7-11. Altogether, over half of all cohort children see their non-resident parent at least once a week the first survey after separation, irrespective of their age at separation. This is a relatively high frequency and supports other research suggesting an increase in contact frequency.

In terms of overnight stays, among those with at least some contact, between three-quarters and four-fifths have an overnight stay at least occasionally, while nearly half of 7 and 11 year-olds with contact with their non-resident father have overnight stays 'often', and this was 44 per cent among five year olds.

Table 2: Contact failure and frequency and overnight stays by survey of separation

		Newly separated by age 3: contact age 3 (%)	Newly separated by age 5: contact age 5 (%)	Newly separated by age 7: contact age 7 (%)	Newly separated by age 11: contact age 11 (%)
Contact failure	No contact	17	11	7	9
	Some contact	83	89	93	91
All (N)		100 (787)	100 (745)	100 (456)	100 (715)
Contact frequency given some contact	Never	18	12	9	9
	< 1 per month	6	6	5	5
	At least 1 per month	16	19	17	17
	1-2 per week	35	36	37	38
	3-4 per week	15	17	19	20
	5-6 per week	4	4	6	4
	Every day	6	6	7	7
Mean contact (1-7)		3.56	3.73	4.00	3.93
All (N)		100 (787)	100 (745)	100 (456)	100 (715)
Overnight stays (where contact)	Never		27	24	19
	Rarely		7	7	8
	Sometimes		22	20	25
	Often		44	49	48
Mean stays (1-4)			2.83	2.94	3.03
All (N)		NA	100 (642)	100 (415)	100 (635)

Source: MCS, age nine-months, 3, 5, 7, and 11 surveys (University of London 2012a,b,c,d, 2014)

Table 3 summarises the extent to which time from separation appears to be associated with contact patterns. The top two panels give the proportions of any contact and mean contact frequencies respectively. The patterns would seem to suggest that time since separation does impact negatively on contact, so that even if (more frequent) contact is more likely if the separation occurs when the child is older, there is an apparent loss of contact over time as the child grows up. We can see this clearly in the final column of the contact frequency panel. Mean contact frequency with an 11-year-old when the separation has only recently occurred (in the last 4 years) is 3.9, but the

mean contact with an 11-year-old when the separation occurred before the child as about 3 is only 2.9.

Table 3: Contact failure and frequency by number of surveys since separation

	Any contact age 3 (%)	Any contact age 5 (%)	Any contact age 7 (%)	Any contact age 11 (%)
Separated by age 3	83	80	78	72
N	787	662	552	567
Separated by age 5	—	89	86	79
N		745	592	541
Separated by age 7	—	—	93	86
N			456	359
Separated by age 11	—	—	—	91
N				715
	Mean contact frequency age 3	Mean contact frequency age 5	Mean contact frequency age 7	Mean contact frequency age 11
Separated by age 3	3.56	3.19	3.08	2.89
N	787	662	552	567
Separated by age 5	—	3.76	3.46	3.20
N		745	591	541
Separated by age 7	—	—	4.0	3.50
N			454	359
Separated by age 11	—	—	—	3.93
N				715
	<i>No measure for stay age 3</i>	Mean frequency of overnight stays age 5	Mean frequency of overnight stays age 7	Mean frequency of overnight stays age 11
Separated by age 3		2.78	2.98	2.78
N		524	428	401
Separated by age 5		2.83	3.07	3.08
N		642	494	419
Separated by age 7		—	2.94	3.06
N			415	308
Separated by age 11		—	—	3.03
N				635

Source: MCS, age nine months, 3, 5, 7, and 11 surveys (University of London 2012a,b,c,d, 2014)

For frequency of overnight stays conditional on contact (bottom panel of Table 3), the pattern is less clear. This would suggest that while contact is sensitive to time since separation, given contact overnight stays are more sensitive to the age of the child and other contextual factors. Nevertheless, we do see some indication that those 11-year-olds whose parents separated before they were 3 had slightly lower frequency of overnight stays, even given contact, than those 11-year-olds whose parents had separated more recently.

We aim to shed more light on these patterns in the multivariate analysis, which follows, in which we estimate how father and family characteristics help to shape these contact patterns, as well as investigating the influence of time since separation on contact.

Fathers' involvement

We look in turn at the different measures of paternal parenting prior to separation and how they are associated with subsequent contact. We estimate first the unadjusted relationship between parenting and contact, and then add the other explanatory variables described above. Table 4 shows the results for the three contact outcomes regressed on paternal involvement, while Tables 5 summarises the results the other three measures of parenting: father's frequency of looking after the child on his own, father's reported closeness to the child, and father's evaluation of his own parenting competence.

Table 4: The relationship between father's parenting involvement and post-separation contact: average marginal effects from logistic regression (any contact) and OLS regression (contact frequency and overnight stay frequency)

Pre-separation measures	Post-separation contact outcomes					
	Any contact		Frequency of contact		Frequency overnight stays	
Paternal involvement	0.013 (0.007)+	0.008 (0.007)	0.080 (0.032)*	0.062 (0.031)*	0.088 (0.027)**	0.075 (0.026)**
Time since separation (months)		-0.002 (0.000)**		-0.013 (0.001)**		-0.000 (0.001)
Child's age in years (centred)		0.012 (0.005)**		0.068 (0.016)**		0.017 (0.012)
Child is girl		-0.011 (0.014)		-0.166 (0.060)**		-0.208 (0.054)**
Father's qualifications (ref=none)						
Tertiary		0.086 (0.025)**		0.183 (0.122)		0.305 (0.087)**
Good secondary / post secondary		0.059 (0.020)**		0.162 (0.099)		0.102 (0.073)
Lower or other		0.018 (0.026)		0.151 (0.130)		0.051 (0.106)
Father not in work		-0.068 (0.026)**		-0.207 (0.129)		-0.308 (0.102)**
Father's age at birth (centred)		-0.000 (0.001)		0.004 (0.005)		0.002 (0.004)
Cohabiting (not married)		-0.014 (0.017)		-0.051 (0.072)		-0.015 (0.057)
Income (banded)		0.024 (0.009)**		0.043 (0.031)		0.107 (0.026)**
Older siblings		0.048 (0.015)**		0.094 (0.072)		0.002 (0.068)
Younger siblings		0.035 (0.033)		0.046 (0.126)		-0.097 (0.091)
London (ref=elsewhere)		-0.007 (0.032)		-0.290 (0.120)*		-0.458 (0.070)**
Mother not in work		-0.048 (0.017)**		-0.225 (0.067)**		-0.076 (0.059)
Father has		0.004		0.001		0.010

longstanding illness	(0.017)	(0.075)	(0.065)
Mother has longstanding illness	-0.011 (0.015)	-0.083 (0.075)	-0.117 (0.062)+
<i>N</i>	4,877	4,874	3,540
<i>R</i> ²		0.00	0.09
		0.01	0.08

Source: MCS, age nine months, 3, 5, 7, and 11 surveys (University of London 2012a,b,c,d, 2014). Standard errors in parentheses + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Note all variables except time since separation and child's age measured prior to separation. Analysis adjusts for complex sample design and wave 1 non-response.

Table 4 shows that father's involvement is marginally significantly associated with contact, i.e. the more involvement the lower the chance of non-contact. However, the inclusion of covariates reduces the size of this association and renders it non-significant. Parenting involvement prior to separation is clearly associated with both frequency of contact and frequency of overnight stays conditional on contact, even when taking account of other factors shaping contact.

For contact and contact frequency but not overnight stays we see clear effects of both time since separation, which increase the chance of non-contact and child's age, which reduces it. Each month since separation decreases the chances of any contact by around 0.2 per cent. Over a year this would amount to a reduction of around 2.5 per cent in the chances of contact. Conversely, each additional year of age increases the chance of contact by around 1.4 per cent. We tested whether the negative impact of time on contact was reduced by parental involvement and, contrary to our expectations, found no evidence that this was the case for this measure of parenting or any of the other parenting measures. (Tables available on request.)

As hypothesised, if the child is a girl rather than a boy, this decreases contact frequency and overnight stays, given contact, but does not influence the chances of any contact. This is then likely to be linked to opportunities for regular contact with young girls compared to young boys being more constrained. Additional analysis (not illustrated) showed that pre-separation parenting was no different for boys and girls, and therefore this association is not attenuated by the inclusion of parenting in the model.

Turning to the other explanatory variables, father's qualifications and having been employed prior to separation, and pre-separation family income are positively associated with both any contact and overnight stays, conditional on contact, but not with frequency of contact. This suggests, in line with other research that family economic context has a bearing on the chances of loss of contact, but do not affect the frequency of contact otherwise. It also indicates that paternal resources are implicated in the ability to have a child staying overnight on a regular basis. On the other hand living in London is associated with both lower frequency contact and fewer overnight stays, suggesting constraints on options not only for having the child stay over but also for suitable activities indicated by more frequent contact. As noted this is

consistent with our hypothesis that living in London is linked to greater pressure on housing space and opportunities for entertaining a young child. However, we tested to see if the 'London' effect was greater for fathers who had been out of work prior to separation, and found no evidence that this was the case. (Results available on request.)

Being in a cohabiting relationship rather than married prior to separation has the expected negative sign in relation to contact outcomes but, by contrast with US research, the coefficient is not statistically significant. Having older, but not younger, siblings is linked to greater chances of having any contact, but not contact frequency or overnight stays. This may be linked to the observed age of child effect. Where there are older siblings the father may be more likely to maintain contact with them and therefore with the younger sibling (the cohort child). But this influence does not extend to the frequency of contact with the cohort child individually.

Finally, we find no association of father's age at birth (net of education) or, contrary to expectations, of his health status on contact. Any impact of health status may be captured by work status, since those with long-term health problems are also more likely to be economically inactive.

We next turn to the other measures of paternal parenting. Since the relationships between the non-parenting covariates and the three contact outcomes can be expected to be broadly similar across models which test the association with different parenting measures, in Table 5 we only summarise the associations between the three remaining parenting measures and the contact outcomes. Full estimates are provided in the Appendix. For completeness and ease of comparison we also include the estimates for parenting involvement from Table 4. Sample sizes for closeness and parenting competence are much smaller than for involvement (that was shown in Table 4) and for looking after the child on their own, as these measures were only collected at certain surveys.

Table 5 provides some evidence that all the different dimensions of parenting are associated with patterns of in contact post-separation but not necessarily in the same way. As with paternal involvement, the father having looked after his child on his own more often is associated with greater frequency of contact and greater frequency of overnight stays, given contact. But it does not affect the overall probability of (non-) contact. This potentially implies that such sole care provides a closer connection to the child, which is supported by the similar results (albeit for a reduced sample) for closeness. Both may also be associated with a prior greater interest in spending more time with the child that influences behaviour both before and after separation.

Table 5: Estimates of the association of paternal parenting variables and post-separation contact, unadjusted and fully adjusted estimates

Post-separation contact outcomes						
Pre-separation parenting measures	Any contact		Frequency of contact		Frequency overnight stays	
	unadj	adj	unadj	adj	unadj	adj
Paternal involvement	0.013 (0.007)	0.008 (0.007)	0.080 (0.032)*	0.062 (0.031)*	0.088 (0.027)**	0.075 (0.026)**
	+					
N	4,877		4,874		3,540	
Father looks after child on own	0.011 (0.009)	0.011 (0.008)	0.129 (0.029)**	0.114 (0.029)**	0.075 (0.027)**	0.077 (0.026)**
N	4,878		4,875		3,540	
Father's closeness to child	0.006 (0.012)	0.003 (0.011)	0.134 (0.078)+	0.131 (0.074)+	0.125 (0.069)+	0.110 (0.064)+
N	1,034		1,033		939	
Perceived parenting competence	0.016 (0.008)	0.013 (0.009)	0.083 (0.047)+	0.065 (0.045)	0.065 (0.041)	0.055 (0.040)
	+					
N	2,079		2,077		1,860	

Source: MCS, age nine months, 3, 5, 7, and 11 surveys (University of London 2012a,b,c,d, 2014). Standard errors in parentheses. + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. All variables except time since separation and child's age measured prior to separation. Analysis adjusts for complex sample design and wave 1 non-response. The unadjusted model includes only the parenting variable, the adjusted model controls additionally for all the covariates in Table 4. Full tables in Appendix.

For parenting competence, there is less evidence that perceived competence shapes post-separation engagement. It is marginally significantly associated with contact and contact frequency in the unadjusted models, but this association decreases and becomes non-significant when we adjust for other factors, including socio-economic status, which is associated with perceived competence. We should recognize, however, that the lack of a significant association with contact frequency may be in part a consequence of the smaller sample size as the coefficients are very similar to those for parental involvement.

We can conclude that fathers who are more involved in their children's care both in actively parenting them, and looking after them independently and who feel close to them are more likely to engage in more frequent contact with their child post-separation and to have them for more overnight stays. However, frequency of contact is at the same time subject to the diminishing impact of time. We find less evidence that parenting competence is linked to subsequent contact patterns, nor that pre-separation parenting is associated with greater chance of maintaining contact at all (or reducing the breakdown of contact)

5. Discussion and conclusions

In this paper we set out to ascertain the extent to which pre-separation characteristics and behaviours were associated with post-separation contact patterns. In the light of extensive policy and academic interest in post-separation involvement of absent parents in their children's lives, our analysis focused for the first time on the relationship between the situation in the family prior to the separation and how that may or may not shape subsequent contact patterns and arrangements. Exploring only those families where the parents were in an intact relationship at age nine months and where the mother was – and remained – the main carer, we explored the contact patterns of separations that occurred from that point onwards. We focused particularly on father's involvement, testing the expectation that more involved fathers (prior to the separation) would maintain greater levels of contact subsequently, even after controlling for paternal characteristics that might be associated with both pre-and post-separation parenting.

We developed a set of six expectations about our findings, listed in Section 2. Figure 1 summarises those six expectations in relation to our three contact outcomes, indicating the extent to which the results met our expectations. As it shows, with the exception of health status, our expectations were, by and large, not rejected. While the results may seem, in retrospect, self-evident, it is notable first that we are able to attest these relationships for the first time, and second, that the associations with parenting, though significant, were not perhaps as large as we might have expected. In addition, we found no interaction between time since separation and fathers' involvement, when we expected greater involvement to slow down the impact of time. This may suggest that even though engaged fathers are more likely to remain so than non-engaged fathers they are not consistently 'good' fathers, who maintain contact no matter what.

Figure 1: Summary of initial research questions, expectations and findings from analysis

Parenting / family context measures	Contact measure					
	Any contact		Contact frequency		Overnight stays (if contact)	
	Initial expectation	Outcome: supported?	Initial expectation	Outcome: supported?	Initial expectation	Outcome: supported?
1a Father has more involvement in childcare / activities	Greater chance of any contact	No	Greater contact frequency	Yes	More overnight stays	Yes
1b Father spends time alone with child more often	Greater chance of any contact	No	Greater contact frequency	Yes	More overnight stays	Yes
1c Father feels close to child	Greater chance of any contact	No	Greater contact frequency	Yes	More overnight stays	Yes
1d Father feels confident as a parent	Greater chance of any contact	No	Greater contact frequency	No	More overnight stays	No
2 Time since separation	a) Lower chance of contact, b) less effect for more involved fathers	a) Yes b) No	a) Lower chance of contact, b) less effect for more involved fathers	a) Yes b) No	No difference conditional on contact	Yes
3 Age of child	Greater chance of any contact	Yes	Greater contact frequency	Yes	More overnight stays	No
4 Sex of child	No difference	Yes	Lower contact frequency for girls	Yes	Fewer overnight stays for girls	Yes
5 Father's health	Poor health: lower chance of any contact	No	Poor health: lower contact frequency	No	Poor health: fewer stays	No
6 Paternal and family socio-economic resources	Higher resources greater chance of any contact	Yes	Higher resources higher contact frequency	Partly	Higher resources more overnight stays	Yes

In relation to our key findings, looking across separations taking place in children's lives from nine months to up to 11 years, we found that father's pre-separation parenting did appear to have an independent association with contact, measured as contact frequency and frequency of overnight stays (conditional on contact). This was the case for different dimensions of paternal parenting, whether active involvement in parenting, frequency of looking after the child on his own or how close he felt to the child. We found less evidence that pre-separation parenting was linked maintaining contact at all (or losing it), nor did we find that perceived competence was positively associated with post-separation contact, suggesting that the association is less about how well he parents and more about how much he invests in his parenting – practically or emotionally.

These findings were robust to the inclusion of socio-economic factors which were important determinants of contact patterns. They suggest that those who are (supported in being) more active parents in the children's youth will maintain such involvement to a greater extent following a separation. Hence, parental leave and paternity leave policies that support the involvement of fathers in parenting early in the child's life and through their early years may have payoffs in terms of subsequent contact.

However, we also found that there was 'decay' in contact with time since separation that was evidenced even when controlling for level of parenting. Hence it was not just that non-involved fathers were more likely to lose touch with their children over time, the duration of separation seems to matter across the board. This demonstrates the challenges faced in maintaining high degrees of contact, as lives change and diverge, whatever the earlier commitment and engagement.

Child age and sex of the child were both linked to patterns of contact, with older children tending to have more frequent contact as we might expect, and girls experiencing less frequent contact with their fathers than boys. While some of this relationship is likely to be driven by opportunities for contact being gendered, it was nevertheless robust to the inclusion of socio-economic variables that might be thought to affect housing options and different opportunities for access and contact.

Socio-economic context was an important factor in shaping possibilities and opportunities for post-separation contact, over and above its association with involvement in parenting prior to separation. The mechanisms underlying these socio-economic impacts on contact deserve further consideration. We have suggested the ways in which opportunities may be more constrained for those with fewer resources, and the finding of a 'London' effect is consistent with such an interpretation, but a full discussion is beyond the scope of this paper, with its focus on paternal parenting.

We have demonstrated that paying attention to pre-separation circumstances has the potential to pay dividends when attempting to understand patterns of post-separation contact and that, in particular, patterns of contact are associated with fathers' behaviour prior to separation. To this extent it is important also to consider how realistic expectations of more 'shared' care are unless there are commensurate increases in – and support for – father's participation in child care in the family home.

6. References

- Amato, P.R. and Fowler, P.R. (2002), 'Parenting practices, child adjustment and family diversity', *Journal of Marriage and the Family*, 64, pp. 703 - 716.
- Beck, A. N., Cooper, C. E., McLanahan, S. and Brooks-Gunn, J. (2010), 'Partnership transitions and maternal parenting', *Journal of Marriage and Family*, 72, pp. 219 - 233.
- Bernardi, F., Boertien, D., Andersson, R., Bastaits, K., & Mortelmans, D. (2013), 'Effects of family forms dynamics on children's well-being and life chances: literature review', *Families and Societies Working Paper*.
- Calderwood, L. (2010) 'Family demographics', in Hansen, K., Jones, E., Joshi, H., and Budge, D. (eds.) *MCS4 User's Guide to Initial Findings: 2nd Edition*, London: Centre for Longitudinal Studies.
- Carlson, M. J., Pilkauskas, N. V., McLanahan, S. S. and Brooks-Gunn, J. (2011) 'Couples as partners and parents over children's early years', *Journal of Marriage and Family*, 73, pp. 317–334.
- Carlson, M.J. and Hoegnaes, R.S. (2010), 'Coparenting in fragile families', *Working Paper WP09-13-FF*, Princeton, <http://crcw.princeton.edu/workingpapers/WP09-13-FF.pdf>, [accessed on 10.08.2012].
- Carlson, M.J., McLanahan, S. and Brooks-Gunn, S. (2008), 'Coparenting and nonresident fathers' involvement with young children after a non-marital birth', *Demography*, 45:2, pp. 461- 488.
- Centre for Social Justice (2012), 'It is time to back marriage', *Briefing Paper*, London, <http://www.centreforsocialjustice.org.uk/>, [accessed on 10.08.2012].
- Centre for Social Justice (2007), *Breakthrough Britain: Family Breakdown*. London.
- Churchill, H. (2012) 'The retreating state? Recent developments in family support policies' in Kilkey, M. et al (eds) *Social Policy Review 24: Analysis and Debate in Social Policy 2012*, Bristol: Policy Press.
- Cm 8273 (2012) *The Government Response to the Family Justice Review: A system with children and families at its heart*, Department for Education and Ministry of Justice, London: HMSO.
- Dermott, E. (2003), 'The "intimate father": defining paternal involvement', *Sociological Research Online*, 8 (4).
- Dermott, E. (2008), *Intimate Fatherhood: A sociological analysis*, Basingstoke: Palgrave Macmillan
- Dornbusch, A.M., Ritter, P.L., Leiderman, H., Roberts, D.F. and Fraleigh, M.J. (1987), 'The relationship between parenting style and adolescent school performance', *Child Development*, 58, pp. 1244 – 1257.
- Ermisch, J. (2005), 'The family market for divorced fathers' contact with their children: testing its operation', *Child Working Paper 6*.
- Ermisch, J. (2008) 'Origins of social immobility and inequality: parenting and early childhood development', *National Institute of Economic Review*, 205, pp. 62 - 71.

- Fortin, J. Hunt, J. and Scanlan, L. (2008) *Taking a longer view of contact: Perspectives of young adults who experience parental separation in their youth*. Brighton: School of Law.
- Goodman, R. (2001), 'Psychometric properties of the strengths and difficulties questionnaire', *Journal of the American Academy of Child and Adolescent Psychiatry*, 40: 11, pp.1337-45.
- Jones, E. (2010), 'Parental relationships and parenting', in K. Hansen, H. Joshi and S. Dex (eds.) *Children of the 21st Century: The first five years*, Bristol: Policy Press, pp. 53-76.
- Jones, E. And Smith, K. (2008) 'Parenting', K. Hansen and H. Joshi (eds.) *Millennium Cohort Study Third Survey: A User's Guide to Initial Findings*, London: Institute of Education, pp. 51 - 57.
- Hansen, K., Jones, E., Joshi, H. and Budge, D. (eds.) (2010), *Millennium Cohort Study Fourth Survey: A User's Guide to Initial Findings*, London: Centre for Longitudinal Studies.
- Haux, T. (2012), 'Parenting support policies in England from 1997 to the present – an overview', PolChi Working Paper No. 12/1.
- Hook, J. and Wolfe, C. (2010), 'New fathers? Residential fathers' time with children in four countries', *Journal of Family Issues*, 33: 4, pp. 41-450.
- Hunt, J. and Roberts, C. (2004), 'Child contact with non-resident parents', *Family Policy Briefing 3*, Oxford: Department for Social Policy and Social Work.
- Hunt, J. (2003), *Researching Contact*, London: One Parent Families.
- Kiernan, K. and Mensah, F. (2010), 'Poverty, family resources and children's early educational attainment: the mediating role of parenting', *British Educational research Journal*, 37: 2, pp. 317 - 336.
- Lader, D. (2008), *Non-Resident Parental Contact, 2007/8*, Omnibus Survey Report No. 38, London: ONS.
- Marsiglio, W. Amato, P., Day, R. and Lamb, M. (2000), 'Scholarship on fatherhood in the 1990s and beyond', *Journal of Marriage and the Family*, 62, pp. 1173 - 1191)
- Mooney, A., Oliver, C. and Smith, M. (2009), *Impact of Family Breakdown on Children's Well-Being: Evidence Review*, Research report DCSF-RR113, London, Department for Children, Schools and Families.
- Murray, C. (1984), *Losing Ground: American Social Policy, 1950-1980*, New York: Basic Books.
- Norman, H., Elliot, M. and Fagan, C. (2014), 'Which fathers are the most involved in taking care of their toddlers in the UK? An investigation of the predictors of paternal involvement', *Community, Work & Family*, 17:2, pp. 163-180.
- O'Brien, M. (2006), 'Well-being of children and labour markets in Europe: Different kinds of risks resulting from the various structures and changes in labour markets', Conference paper for WELLCHI Network Conference, March, 31st to April, 1st.
- ONS (2012), 'Lone parent families with dependent children in UK near two million'. *News Release*, 19th of January, <http://www.ons.gov.uk/ons/rel/mro/news-release/lone-parent-families-with-dependent-children-in-uk-near-two-million/famandhousenr0112.html> [accessed on 7th of September 2012].

- ONS (2011), 'Divorces in England and Wales 2010'. *Statistical Bulletin*, http://www.ons.gov.uk/ons/dcp171778_246403.pdf [accessed on 7th of September 2012].
- Plewis, I. (2007), *Millennium Cohort Study First Survey: Technical Report on Sampling (4th Edition)*, London: Centre for Longitudinal Studies, Institute of Education.
- Poole, E., Speight, S., O'Brien, M., Connolly and Aldrich, M. (2013), 'What do we know about non-resident fathers?', London: NatCen.
- Rake, K. (2011) 'Parenting under the Microscope' in *Where now for parenting? Perspectives on parenting, policy and practice*, London: Family and Parenting Institute.
- Riots, Communities and Victims Panel (2012), *After the riots: The final report of the Riots Communities and Victims Panel: Executive Summary and Conclusions*, London, <http://riotspanel.independent.gov.uk/wp-content/uploads/2012/03/Riots-Panel-Executive-Summary-and-Recommendations.pdf>, [accessed on 10.08.2012].
- Sandstrom, M.J. (2007), 'A link between mother's disciplinary strategies and children's relational aggression', *British Journal of Developmental Psychology*, 25, pp. 399 – 407.
- University of London. Institute of Education. Centre for Longitudinal Studies.
 (2012a), 'Millennium Cohort Study: First Survey, 2001-2003[computer file]. 10th Edition.' Colchester, Essex: UK Data Archive [distributor], August 2012. SN: 4683.
 —. (2012b), 'Millennium Cohort Study: Fourth Survey, 2008 [computer file]. 3rd Edition.' Colchester, Essex: UK Data Archive [distributor], August 2012. SN: 6411 , <http://dx.doi.org/10.5255/UKDA-SN-6411-2>.
 —. (2012c), 'Millennium Cohort Study: Second Survey, 2003-2005 [computer file]. 7th Edition.' Colchester Essex: UK Data Archive [distributor], August 2012. SN: 5350.
 —. (2012d), 'Millennium Cohort Study: Third Survey, 2006 [computer file]. 5th Edition.' Colchester, Essex: UK Data Archive [distributor], August 2012. SN: 5795.
 —. (2014), 'Millennium Cohort Study: Fifth Survey, 2012 [computer file].' Colchester, Essex: UK Data Archive [distributor], February 2014. SN: 7464.
- Waldfogel, J. (2010), *Britain's War on Poverty*, Russell Sage Foundation: New York.
- Wilson, B. and Smallwood, S. (2007), 'Understanding recent trends in marriage'. *Population Trends*, 28, pp. 24-32.

7. Appendix

Table A1: Models of the relationship between father looking after child on his own and post-separation contact

Post-separation contact outcomes						
Pre-separation measures	Any contact		Frequency of contact		Frequency overnight stays	
Father looks after child on own	0.011 (0.009)	0.011 (0.008)	0.129 (0.029)**	0.114 (0.029)**	0.075 (0.027)**	0.077 (0.026)**
Time since separation		-0.002 (0.000)**		-0.013 (0.001)**		0.000 (0.001)
Child age (centred)		0.012 (0.004)**		0.063 (0.016)**		0.014 (0.012)
Child is girl		-0.010 (0.015)		-0.153 (0.061)*		-0.199 (0.054)**
Father's qualifications (ref=none)						
Higher		0.088 (0.025)**		0.204 (0.120)+		0.330 (0.089)**
Good secondary or post secondary		0.058 (0.020)**		0.160 (0.098)		0.109 (0.075)
Lower		0.019 (0.026)		0.147 (0.129)		0.046 (0.105)
Father not in work		-0.075 (0.029)*		-0.261 (0.129)*		-0.331 (0.103)**
Father's age at birth (centred)		-0.000 (0.001)		0.005 (0.005)		0.002 (0.004)
Cohabiting (not married)		-0.015 (0.017)		-0.078 (0.073)		-0.039 (0.057)
Income (banded)		0.025 (0.009)**		0.050 (0.032)		0.113 (0.027)**
Older siblings		0.047 (0.014)**		0.094 (0.072)		0.001 (0.069)
Younger siblings		0.036 (0.033)		0.062 (0.123)		-0.082 (0.090)
London (ref=elsewhere)		-0.004 (0.032)		-0.261 (0.118)*		-0.435 (0.069)**
Mother not in work		-0.044 (0.018)*		-0.175 (0.070)*		-0.051 (0.062)
Father had long-term		0.004 (0.017)		-0.006 (0.076)		0.007 (0.064)

illness						
Mother had		-0.012		-0.088		-0.118
long-term		(0.015)		(0.074)		(0.062)+
illness						
<i>N</i>	4,878	4,878	4,875	4,875	3,540	3,540
<i>R</i> ²			0.01	0.10	0.01	0.08

Source: MCS, age nine months, 3, 5, 7, and 11 surveys (University of London 2012a,b,c,d, 2014)

+ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$

Table A2: Models of the relationship between father's reported closeness to child and post-separation contact

Pre-separation measures	Post-separation contact outcomes					
	Any contact		Frequency of contact		Frequency overnight stays	
Father's closeness to child	0.006	0.003	0.134	0.131	0.125	0.110
Time since separation	(0.012)	(0.011)	(0.078)+	(0.074)+	(0.069)+	(0.064)+
Child age centred		(0.000)*		(0.003)*		(0.002)
Child is girl		-0.004		-0.017		-0.002
Father's qualifications (ref=none)		(0.007)		(0.038)		(0.030)
Higher		0.005		-0.184		-0.020
Good secondary or post-secondary		(0.015)		(0.103)+		(0.099)
Lower		0.077		0.309		0.105
Father not in work		(0.030)*		(0.185)+		(0.154)
Father's age at birth (centred)		0.041		0.108		-0.089
Cohabiting (not married)		(0.030)		(0.174)		(0.144)
Income (banded)		-0.000		0.172		0.080
Older siblings		(0.036)		(0.212)		(0.167)
Younger siblings		-0.111		-0.276		-0.091
		(0.049)*		(0.273)		(0.202)
		0.002		0.021		-0.013
		(0.001)*		(0.010)*		(0.006)*
		-0.016		-0.108		0.175
		(0.018)		(0.110)		(0.093)+
		0.006		-0.014		0.115
		(0.008)		(0.049)		(0.043)**
		-0.005		-0.017		-0.049
		(0.021)		(0.127)		(0.119)
		0.031		0.112		0.036

		(0.027)	(0.144)	(0.121)
London (ref=elsewhere)		0.075	0.102	-0.242
		(0.011)**	(0.176)	(0.100)*
Mother not in work		-0.030	-0.449	-0.159
		(0.018)+	(0.124)**	(0.109)
Father has long-term illness		0.010	-0.051	0.164
		(0.020)	(0.138)	(0.101)
Mother has long-term illness		0.001	0.000	-0.145
		(0.017)	(0.110)	(0.113)
<i>N</i>	1,034	1,033	939	
<i>R</i> ²		0.00	0.07	0.01
			0.01	0.07

Source: MCS, age nine months, 3, 5, 7, and 11 surveys (University of London 2012a,b,c,d, 2014) + $p < 0.1$; * $p < 0.05$; ** $p < 0.01$

Table A3: Models of the relationship between father’s evaluation of his parenting and post-separation contact

Pre-separation measures	Post-separation contact outcomes					
	Any contact		Frequency of contact		Frequency overnight stays	
Father’s parenting competence	0.016 (0.008) +	0.013 (0.009)	0.083 (0.047)+	0.065 (0.045)	0.065 (0.041)	0.055 (0.040)
Time since separation		-0.001 (0.000)* *		-0.011 (0.002)**		0.003 (0.001)+
Child age (centred)		0.001 (0.005)		0.032 (0.021)		-0.000 (0.020)
Child is girl		0.003 (0.016)		-0.233 (0.089)**		-0.176 (0.075)*
Father’s qualifications (ref=none)						
Higher		0.072 (0.029)*		0.368 (0.158)*		0.392 (0.113)**
Good secondary or post-secondary		0.043 (0.022)+		0.176 (0.149)		0.068 (0.102)
Lower or other		0.015 (0.031)		0.254 (0.165)		0.166 (0.127)
Father not in work		-0.055 (0.034)		-0.206 (0.203)		-0.365 (0.149)*
Father’s age at birth (centred)		0.001 (0.001)		0.015 (0.007)*		0.002 (0.005)
Cohabiting (ref=married)		0.009 (0.014)		0.061 (0.084)		0.029 (0.076)
Income (banded)		0.010 (0.009)		-0.044 (0.043)		0.076 (0.037)*
Older		0.004		0.023		0.095

siblings		(0.022)		(0.097)		(0.090)
Younger siblings		0.017		0.080		-0.016
London (ref=elsewhere)		(0.029)		(0.133)		(0.113)
		-0.017		-0.230		-0.504
Mother not in work		(0.039)		(0.122)+		(0.143)**
		-0.036		-0.317		-0.159
Father has long-term illness		(0.018)*		(0.092)**		(0.088)+
		0.005		-0.081		0.038
Mother has long-term illness		(0.019)		(0.097)		(0.083)
		-0.000		-0.105		-0.140
<i>N</i>	2,079	(0.017)		(0.084)		(0.086)
<i>R</i> ²		2,079	2,077	2,077	1,860	1,860
			0.00	0.08	0.00	0.09

Source: MCS, age nine months, 3, 5, 7, and 11 surveys (University of London 2012a,b,c,d, 2014) + $p < 0.1$; * $p < 0.05$; ** $p < 0.01$