

Non-residential Fatherhood and Child Involvement: Evidence from the Millennium Cohort Study

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Abstract

Fifteen per cent of British babies are now born to parents who are neither cohabiting nor married. Little is known about non-residential fatherhood that commences with the birth of a child. Here, we use the Millennium Cohort Study to examine a number of aspects of this form of fatherhood. Firstly, we consider the extent to which these fathers were involved with or acknowledged their child at the time of the birth. Secondly, we identify characteristics that differentiate parents who continue to live apart from those who move in together. Thirdly, for the fathers who moved in with the mother and their child, we enquire whether they differ in the extent of their engagement in family life compared with fathers who have been living with the mother since birth. Finally, for fathers who were living apart from their child when the child was nine months old, we assess the extent to which they were in contact, contributed to their maintenance and were involved in their child's life at this time.

Introduction

Over recent decades there has been growing concern and interest among policy makers, families and scholars in the role that non-resident fathers play in the lives of their children, and more recently in the phenomenon of unmarried parenthood and the appropriate rights and responsibilities of such fathers (Home Office, 1998; Lewis, 2001; Barlow, 2004). Across most developed societies there have been noticeable increases in the number of children born to unmarried parents, with most of this increase being due to the rise in births to cohabiting couples. However, in Britain there has also been an increase in the proportions of all babies born to parents who are not living together at the time of the birth (Kiernan, 2004), and the proportions of children who commence their lives without a father present is higher in Britain than in most other European countries (Andersson, 2002). It is this new phenomenon where non-residential fatherhood commences with the birth of the child that is the focus of this article.

With the rise in divorce and non-marital childbearing, nowadays men spend less time in marriage and with their children than was the case in the recent

past (Bianchi, 1998; Rendall *et al.*, 2001). Fatherhood has seemingly become a more voluntary role. Although some men may not even be aware that they have fathered a child, those who are aware have varied responses to paternity, with some men choosing not to be involved in their children's lives, while others embrace the role with enthusiasm (Lewis, 2000), and others may be involuntarily excluded from their children's lives. The degree of attachment to the mother also varies; some fathers are formally attached through the bonds of marriage while others form more informal relationships both within and across households. In such relationships, the social norms that define roles and responsibilities may be less clear cut than those in formal marriages (Furstenberg, 1988; Maclean and Eekelaar, 1997; Lewis, 2001).

Very little is known about non-residential fatherhood that begins at the birth of a child rather than after the breakdown of a marriage or cohabiting union. Such fathers are largely statistically invisible and little is known about the extent to which these fathers maintain a relationship with their children or what form this takes. The advent of the UK Millennium Cohort Study (MCS) allows us to examine some of these issues for a large, nationwide sample of new parents and their children. The MCS baseline study took place in 2001–2002 and collected information from over 18,000 families at the time the child was around nine months old.¹ The study over-sampled for ethnic minority families and children living in areas with high rates of child poverty as well as the smaller countries of the UK: Scotland, Wales and Northern Ireland (see Shepherd *et al.*, 2004; Smith and Joshi, 2002, for more details).

For the MCS sample we estimate that 60 per cent of babies were born to married couples, which is identical to the proportion found from Birth Registration data (ONS, 2004), 25 per cent were born to cohabiting couples and 15 per cent were born to parents who were not in a co-residential union at the time of the birth, in the sense that the mother reported that the parents were neither married nor cohabiting (Kiernan and Smith, 2003). For ease of description, this latter group of parents will be collectively referred to as being outside of a union (marital or cohabiting) or not being in a partnership. Additionally, we do not have established terms for parents who have a child outside of a union or a partnership, but for simplicity in this article these parents will be referred to collectively as 'solo' mothers or non-resident fathers.²

Given the novel nature of the data, we will examine a number of aspects of fatherhood for the subset of fathers who were not living with the mother at the time of the birth. Firstly, we consider the extent to which fathers were involved with or acknowledged their child at the time of the birth, as judged by whether they were present at the birth of their child, and whether they were included on the child's birth certificate. Secondly, given that some fathers who were not resident at the time of the birth subsequently moved in with the mother and their child, while others continued to live apart, we examine the characteristics that differentiate

parents who continue to live apart from those who move in together. Thirdly, for the fathers who 'moved in' with the mother and their child, we enquire whether they differ in the extent of their engagement in family life compared with fathers who have been living with the mother since the child's birth.³ Finally, for fathers who were living apart from their child when the child was nine months old, we assess the extent to which they were in contact, contributed to their maintenance and were involved in their child's life at this time.⁴

A profile of non-partnered parents and their children

To set the scene we start with a brief description of the characteristics of the parents who were not in a partnership at the time of the birth and how they compare with married and cohabiting parents.⁵ From Table 1 we see that the parents not in a co-residential union at the time of the birth, numerically speaking, were not predominantly youthful parents: 44 per cent of the solo mothers and 63 per cent of the non-resident fathers were over the age of 25. But on average they were substantially younger than their married and cohabiting counterparts. Solo mothers and cohabiting mothers were more likely than married mothers to be having their first child, but even among these groups one in two of the mothers were having a second or later child. The human capital of these families as assessed by the mother's educational attainment was also much lower than that seen among the married and cohabiting groups. The great majority of the solo mothers (86 per cent) were White; the next two biggest groups were the Black Caribbean and Black African groups (4 per cent each); and the smallest groups were those from the Indian sub-continent. We also note that giving birth within a cohabiting union is relatively rare among all the ethnic minority groups, whereas marriage is a relatively more common setting among the Asian families and solo motherhood more common among Black mothers. There was also a marked spatial variation by type of partnership status at birth. Over half of the out-of-partnership births occurred to parents who lived in disadvantaged wards compared with one in four of the marital births.

Mothers were asked whether the baby had been planned or whether the pregnancy had been a surprise. From Table 2 we see that only 16 per cent of the babies born to non-resident parents were planned compared with 74 per cent of those born to married couples and 47 per cent of those born to cohabiting couples. Despite the lack of planning among the parents not in a union, these fathers identified sufficiently with their paternity for 45 per cent to be present at the birth, and 63 per cent were included on the birth certificate. Unsurprisingly, these were substantially lower proportions than those observed among married and cohabiting fathers, among whom more than 90 per cent were present at the birth, and virtually all the cohabiting fathers were included on the child's birth certificate.

TABLE 1. Characteristics of families according to the partnership context of the parents at the time of the birth*.

Numbers in the sample**	Solo 3522	Cohabiting 4418	Married 10801
Characteristic	%	%	%
Mother's age at birth			
Under 20	26	11	1
20–24 years	30	26	9
25–29 years	20	29	29
30 and older	24	34	61
Father's age at birth			
Under age 24	37	22	4
25–34 years	42	54	58
35 and older	21	24	38
Parity of child % first born	52	51	37
Mother's educational qualifications			
None	28	13	8
NVQ level 1/3	62	63	49
NVQ level 4/5	10	24	43
Mother's ethnic origin			
White	85.9	96.9	86.7
Mixed	2.3	0.7	0.7
Indian	0.9	0.1	2.8
Pakistani	1.4	0.1	4.5
Bangladeshi	0.3	0.0	1.5
Black Caribbean	3.7	0.7	0.6
Black African	3.8	0.8	1.1
Other	1.8	0.6	2.1
Type of ward***			
Advantaged	36	56	68
Disadvantaged	55	43	26
Ethnic	8	2	5

*The statistics in this and subsequent tables are based on weighted data and were derived from the survey commands in STATA designed for weighted data (STATA, 2003). The differences across the groups on these characteristics were all significant at the level of 1 in 10000.

**These are the sample numbers in the three partnership categories and are the maximum numbers for the dependent variable, totalling 18741 cases. There was missing information on the individual characteristics and these cases have been excluded. For example, the n for the parity variable which had the most missing values was 18495, for father's age at birth it was 18592, the remaining variables had fewer than 45 missing cases.

***The disadvantaged wards were areas of high child poverty, ethnic wards were those with high proportions of ethnic minority populations, and the advantaged wards were neither of these.

Involvement of the father at the time of the birth

Being present at the birth or inclusion on the child's birth certificate suggests some degree of closeness and involvement around the time of the birth. Moreover, the policy implications of these indicators are of some importance. Since July 2001 in

TABLE 2. Pregnancy and birth characteristics according to the partnership context of the parents at the time of the birth*.

Characteristic	Solo %	Cohabiting %	Married %
Baby planned	16	47	74
Baby surprise	84	53	26
Number in the sample	3512	4408	10776
Father present at birth			
Yes	45	92	93
No	55	8	7
Number in the sample	3515	4412	10794
Father on the birth certificate			
Yes	63	97	Not applicable
No	37	3	
Number in the sample	3517	4416	

*The differences across the groups on these characteristics were significant at the level of 1 in 10000. All the percentages are weighted.

Northern Ireland and from December 2003 in England and Wales, fathers who jointly registered the birth of their baby have had equal parental responsibility akin to married parents. Parental responsibility provides important legal rights such as the ability to be involved in decisions pertaining to the child's residence, education, religion and medical treatment. Unmarried fathers in Scotland (at the time of writing) do not have this right. The great majority of the unmarried fathers in the MCS study do not have this automatic right as only 3 per cent of the weighted sample of babies were born in Northern Ireland. Thus the majority of unmarried fathers of the MCS children can only acquire parental responsibility by either marrying the child's mother, or by obtaining a Parental Responsibility Agreement (PRA) signed by the mother; if the mother does not agree to a PRA, the father can apply to the courts for a Parental Responsibility Order. Facts such as being on the birth certificate or being present at the birth of the child tend to count favourably in such submissions (Families Need Fathers website www.fnf.org.uk).

As we saw in Table 2, among the set of non-resident fathers, 63 per cent were included on the birth certificate, which was a higher proportion than the 45 per cent reported as having been present at the birth.⁶ As might be expected, there was a degree of overlap between the groups of fathers present at the birth and included on the birth certificate, but they were not coterminous behaviours. Forty per cent of the non-resident fathers were present at the birth and on the birth certificate, 32 per cent were neither at the birth nor on the birth certificate, 23 per cent were registered as the father on the birth certificate but were not present at the birth, and a tiny minority of the fathers (5 per cent) were present at the birth but not included on the birth certificate. Information on whether the

TABLE 3. Non-resident fathers' involvement at birth and whether they were resident or not when the baby was nine months old.

Father involvement at birth	Resident Full-time	Resident Part-time	Non-resident	Total
Present at birth %	69	72	37	45
On the birth certificate %	80	90	56	63
Father neither at the birth nor on the birth certificate	6	2	92	100
On birth certificate only	10	9	80	100
At the birth only	13	8	79	100
At the birth and on the birth certificate	23	16	61	100
Numbers in sample	519	308	2689	3516
Percentage	14	10	76	100

All the percentages are weighted.

father was present at the birth of the child provides an indication of the degree of closeness of the father to the mother and child at birth, and may well be an important determinant of future contact and involvement; we investigate this below.

Characteristics of non-resident and resident fathers

At the time of the interview, when the cohort baby was around nine months old, 84 per cent of all the fathers of the Millennium Cohort children were living with their child, 2 per cent were living part-time in the home, and 14 per cent of the fathers were non-resident at this time.⁷ The great majority of the fathers who were non-resident at this time (84 per cent) had not been married to or cohabiting with mother at the time of the birth; the remainder were cohabiting (12 per cent) and married fathers (4 per cent) who had separated from the mother since the birth of their child.

Our focus remains on the fathers of the 15 per cent of children who were born outside of a partnership. At the time of the interview when the child was nine months old, 24 per cent of these fathers were living with the mother and their child, made up of 14 per cent who were living there full-time and 10 per cent part-time (that is, living with the mother at least one day a week). Thus, part-time residence is an important component of the family structure of these families. For these three sub-sets of fathers, we investigated to what extent they differed with respect to the degree of involvement at birth and how they compared on a range of characteristics: including age at parenthood, educational level of the mother, gender and parity of the baby and ethnicity. However, with the exception of father involvement at birth and ethnicity, we found no statistically significant difference across and between the sets of fathers on these characteristics and only report on these two aspects in Tables 3 and 4.⁸

TABLE 4. Non-resident fathers' residential situation at nine months according to the ethnic group of mother.

Ethnic group	Resident Full-time	Resident Part-time	Non-resident	Total Number N = 100%
White	14	10	76	2875
Mixed	11	16	73	90
Indian	61	0	39	56
Pakistani	26	5	69	75
Bangladeshi	35	0	65	21
Black Caribbean	3	12	85	145
Black African	5	6	89	171
Other	36	7	56	80
Numbers in sample	518	308	2683	3509
Percentage	14	10	76	100

All the percentages are weighted.

From the upper part of Table 3 we see that the two sets of resident fathers compared with those who were non-resident were much more likely to have been present at the birth and to have been named on the child's birth certificate. In the lower part of the table we take a different perspective and ask what proportions of fathers who were present at the birth or on the birth certificate were resident or not by the time the child was nine months old. Additionally, we have combined the two measures being present at birth and on the birth certificate to assess the relative importance of these two elements. We see that where the father was present at the birth and on the birth certificate, four out of ten of these fathers were living with the mother at least part of the time, whereas where they were neither at the birth nor on the certificate only 8 per cent were doing so. Where the fathers met only one of the criteria, there was little difference between being present at the birth and being on the birth certificate in the propensity to be living with the mother, and these fathers were intermediate between the two end groups in the extent to which they were non-resident. Fathers in the intermediate categories may well include fathers who were unable to be present due to constraints such as working or living away from the mothers' locality, and this may also be the case for some of the fathers who were neither at the birth nor on their child's birth certificate.

There were also some differences according to the mother's ethnicity and the father's living arrangements. From Table 4 we see, that relatively speaking, solo Black mothers were less likely, whereas those of Asian origins were more likely to be living with the child's father. These findings are in accord with other British studies of ethnicity and family structure, particularly studies of lone-mother families (ONS, 1996; Scott *et al.*, 2001). We also see that among the group of solo Black mothers, particularly those of Caribbean origin, the father of the child is substantially more likely to be living there on a part-time rather than a full-time

TABLE 5. Resident fathers' involvement with their nine month old child according to partnership context at birth.

Characteristic	Resident father	Resident father	Resident father – full-time	Resident father – part-time
	Married at birth	Cohabiting at birth	Mother solo at birth	Mother solo at birth
At least once a day % who look after the baby on their own	31.2	31.9	35.5	20.1
Number in sample	9291	3458	414	236
% who change the baby's nappy	56.9	59.4	56.2	41.1
Number in sample	9294	3458	414	236
% who feed the baby	52.3	56.1	58.7	45.0
Number in sample	9294	3458	413	236

All the percentages are weighted. Fathers included here are those who were living with the mother (either full- or part-time) and filled in the partners' questionnaire.

basis, whereas among the Asian mothers it is very rare for the father to be living there on a part-time basis.⁹

Resident fathers' engagement with their baby

For the group of fathers who had 'moved in' with the mother, we went on to enquire whether these resident fathers who had been more loosely connected to the mother at the time the baby was born, were less engaged with their child than resident fathers who were married or cohabiting with the mother at the birth. In other words, among fathers living with their child, does the level of engagement with the child differ according to the partnership context in which the child was born? We explored this issue using responses made by the father to a set of questions on their involvement with the baby. The questions were: how often they looked after the baby on their own; changed the baby's nappy; and how often they fed the baby. The frequency with which these activities occurred was coded into at least once a day versus less frequently.¹⁰

Table 5 shows the proportions of fathers who carried out these activities at least once a day according to whether the parents were married, cohabiting or not in a partnership at the time of the birth. The latter group was sub-divided into whether they were living with the mother full-time or part-time. Not surprisingly, fathers who were only living there part-time were less likely than the other fathers to be involved with their child on a daily basis. However, fathers who were not in partnership with the mother at the time of the birth but were now living with the mother on a full-time basis were not significantly different from the other two groups of parents in the extent to which they were involved with their baby. This

suggests that among fathers who live with their child, at least for baby–father involvement, there is little negative legacy of the partnership status at birth.

Non-resident fathers' contact and involvement at nine months

The majority of fathers (76 per cent) who were not living with the mother at the time of the birth had not moved in with the mother and their child, but many were still involved in their children's lives. Again we have to rely on information collected from the mothers on the extent to which non-resident fathers were in contact with her and their child, and among the fathers who were in contact the extent of their involvement in their child's lives. These measures may be underestimates as there is evidence of substantial discrepancies between mothers and fathers in the reported levels of contact, with mothers painting a less generous picture of father contact and involvement than non-resident fathers (Blackwell and Dawe, 2003; Seltzer and Brandeth, 1994). Among the set of fathers who were neither married to or cohabiting with the mother at the time of the birth and were residentially separated from their nine-month-old child, mothers reported that 60 per cent were in contact with them and their baby. For the fathers who were in contact, the mothers were asked about the frequency with which he saw his child; the level of interest he showed in the child; and her degree of friendliness with him. Among our set of non-resident fathers who were in contact with the mother, 77 per cent saw their child at least once a week, 64 per cent were described as being very interested in their child, and in 75 per cent of the cases mothers reported that they were on friendly or very friendly terms with the father. All the mothers, whether they were in contact or not, were asked whether the father contributed any money to the child's maintenance: 29 per cent of this set of non-resident fathers made some contribution to the child's maintenance either on a regular or irregular basis.

We have shown that the extent of involvement at birth among non-resident fathers was related to whether or not they subsequently moved in with the mother and their child. Here we investigate the importance of this factor on the probability of non-resident fathers being involved with their child in later infancy. Again we combined father's presence at birth and being on the birth certificate. Table 6 shows the distribution of this variable for whether the residentially separated fathers were in contact, paid maintenance, saw their child at least weekly and whether the mother described the father as being very interested in his child and whether they were on friendly terms. Overall, among the set of fathers who had not moved in with their child, the two largest groups were those neither at the birth nor on the birth certificate (39 per cent of the fathers) and the set who were on both (32 per cent), 24 per cent were only recorded on the birth certificate and only 6 per cent were at the birth but not on the birth certificate.

TABLE 6. Non-resident fathers' contact and involvement at nine months according to their involvement at birth among fathers who were non-resident at the time of the birth.

Father involvement at birth	% In contact	% Pays maintenance	% Sees child at least weekly	% Interested in the child	% Parents on friendly terms
Father neither at the birth nor on the birth certificate	30	10	55	45	61
On birth certificate only	66	33	70	58	67
At the birth only	72	30	82	64	75
At the birth and on the birth certificate	88	50	90	76	86
Total Percentage	60	29	77	64	75
Numbers in sample	2679	2673	1571*	1569*	1569*

*Question asked only if the father was in contact. All the percentages are weighted.

It is clear from Table 6 that the great majority of fathers who were both present at the birth and included on the child's birth certificate were in contact, and among those in contact the great majority saw their child frequently, were very interested in their child, and were on friendly terms with the mother, and one in two contributed maintenance to their child. The polar opposite fathers, those who were neither at the birth nor on the birth certificate were much less likely to be in contact, but even so almost one in three of these fathers were still in contact with their children. The two intermediate groups were broadly similar to each other across most of the domains.

We were also interested in assessing the relative importance of the birth involvement measures with later father contact and involvement after taking into account other attributes of the families. To this end we fitted a series of logistic regression models that included the combined measure of father's involvement at the time of the birth, with a set of characteristics that pre-dated or were fixed at the birth. These included the parents' ages at birth, mother's educational qualifications, father's ethnic group, whether the baby was a surprise, together with whether the baby was the first-born child of the mother and the sex of the child.

Contact and payment of maintenance

The first two columns in Table 7 show the odds ratios derived from multivariate logistic regression analyses, for whether the non-resident fathers were in contact or paid maintenance with respect to the specified factors.¹¹ There was a tiny minority of fathers, 5 per cent, who paid maintenance but were not in contact with their children. In this analysis, we have reduced the number of

TABLE 7. Odds ratios for fathers' involvement at nine months among fathers who were non-resident at birth.

	Father in contact	Father pays maintenance	Father sees child at least weekly	Father is very interested in the child	Parents are on friendly terms
Characteristic					
Father neither at birth nor on the birth certificate	1.0	1.0	1.0	1.0	1.0
Father on birth certificate only	4.3***	4.0***	2.0***	1.7**	1.4
Father at birth only	5.7***	3.6***	4.1***	2.3**	2.1*
Father at birth and on the birth certificate	15.4***	8.4***	6.8***	4.1***	4.5***
Baby a surprise	0.8	0.7*	0.8	0.9	1.2
Female child	0.9	1.0	1.0	1.1	0.9
First-born child of the mother	0.8	1.2	0.6**	1.0	1.0
Mother's age at birth					
Under age 20	1.0	1.0	1.0	1.0	1.0
20–24 years	0.9	1.1	0.7	1.0	1.2
25 and older	0.9	1.1	0.6	0.9	0.6
Father's age at birth					
Under age 24	1.0	1.0	1.0	1.0	1.0
25–34 years	0.9	1.0	1.1	0.9	1.0
35 and older	1.5	1.0	0.7	0.8	1.3
Father's ethnic origin					
White	1.0	1.0	1.0	1.0	1.0
Mixed	2.4	1.4	0.5	2.0	0.6
Indian	1.0	0.6	0.2*	1.5	2.8
Pakistani/Bangladeshi	0.9	0.8	0.6	0.7	0.4**
Black	0.9	1.0	0.6*	1.1	1.1
Other	0.8	0.7	0.3**	1.8	1.7
Mother's qualifications					
Some	1.4*	1.7***	1.0	1.2	0.9

$p < 0.001$ ***, $p < 0.01$ ** , $p < 0.05$ *. All the statistics are weighted.

categories on some of the variables, as more detail did not contribute additional insights.

It is clearly apparent from the multivariate analyses shown in Table 7 that the extent of the father's involvement at the birth is an important determinant of whether they are in contact or pay maintenance. Being at both the birth of the child and on the child's birth certificate is by far the strongest association seen here. Fathers who were only at the birth or only on the birth certificate exhibit significantly higher odds of being in contact and paying maintenance than those with neither attribute (tested in the table) but much lower odds of being in contact and paying maintenance compared with fathers with both attributes (tested separately), and the differences between the odds of being either only at the birth or on the birth certificate were not significantly different from one

another. Moreover, the inclusion of the background factors barely changed the odds ratios for these categories. For example, the bivariate odds ratios for whether the father was in contact or not by involvement at birth were respectively 4.5, 6.0 and 16.6 compared with those shown in Table 7, where other factors have been included (4.3, 5.7 and 15.3). This lack of alteration also applied to the other outcomes shown in Table 7.

There was little suggestion from the multivariate analyses on contact and payment of maintenance that the odds that a father would be in contact or pay maintenance varied much according to the child's sex and parity, the age of the parents, or father's ethnic group. There was evidence that mothers with more human capital, in terms of having qualifications, were more likely to be in contact with the father and to be in receipt of maintenance than those without qualifications. It may be that mothers with more education are better able than other mothers to negotiate with the non-resident fathers, perhaps because they have greater skills and confidence. The fathers of these children may also be more likely to be in work or have higher incomes and therefore better able to contribute to their child's maintenance, given that romantic attachments generally tend to be homogamous (Kalmijn and Flap, 2001). It is also possible that less-educated mothers, who are also more likely to be out of the labour market, are more likely to be receiving payments from the Child Support Agency and these fathers may be less inclined to pay maintenance if the money is absorbed by a reduction in benefits. These findings with respect to education are in accord with more general studies of families with absent fathers, such as those of Bradshaw *et al.* (1999) and Marsh and Perry (2003). Perhaps not unsurprisingly, where the pregnancy was unintended fathers were less likely to pay maintenance.

Frequency of involvement

Turning to whether the father saw the child at least weekly or less frequently, again we see the importance of father involvement at birth, and the pattern is broadly similar to that seen with regard to contact and maintenance. There were also some ethnic differences in the frequency with which the father saw their child; all the groups of fathers from the various ethnic minorities were less likely than White fathers to see their child on a weekly basis or less, but only for Black fathers, those with origins in the Indian sub-continent and those of 'other'¹² origins were the odds ratios significantly different from the baseline group of White fathers. This chimes with the findings from the study by Blackwell and Dawe on Non-Resident Parental Contact in Great Britain (Blackwell and Dawe, 2003) who found that children whose resident parent was White were more likely than those whose resident parent was non-White to have weekly contact with their non-resident parent. This study did not differentiate according to type of ethnic group. Few studies, even in the USA, have examined the parenting behaviour of non-resident fathers in different ethnic groups (King *et al.*, 2004), and the few

that have mainly again relate to White–Black differences. The findings have been mixed with some studies reporting differences and others the converse (Cooksey and Craig, 1998; Carlson and McLanahan, 2005). Our findings on non-resident new fathers suggest that there are differences according to ethnic group, but whether this arises from socio-economic differences between the groups or other factors remains an open question until we have more background information on the non-resident fathers. There is also no information in the baseline survey of the MCS on the physical distance between the homes of the two parents, which is unfortunate as distance has been shown to be among the most important determinants of the frequency with which a father sees his child (Blackwell and Dawe, 2003).

Interest in the child and parental relations

As well as these concrete indicators of contact, payment of maintenance and frequency with which the father saw the child, we also looked at whether father's involvement at birth was associated with more emotional dimensions of later involvement, here assessed by whether the mother viewed the father as being very interested in their child or not, or whether she reported that she and the father were on friendly terms or not. Again, the lens is that of the mother, and the father's perception may have been more positive.

The extent of the father's involvement at birth again was an important predictor of degree of his interest in the child and the friendliness of the relationship with the mother. But interestingly, we see that parental relations in terms of degree of friendliness among those where a father was only on the birth certificate were not significantly different from the baseline group of fathers who were neither at the birth or on the birth certificate, suggesting that for some parents the presence of the father's name on the birth certificate may represent a more formal recognition than necessarily a personal attachment to the mother and child.

Taking a broad sweep of Table 7 with respect to father involvement at birth and his involvement in later infancy and focusing on the two sets of fathers who were only at the birth or on the birth certificate, we see that there are, with the exception of the payment of maintenance, higher odds of father involvement for those who were at the birth compared with those who were only on the birth certificate. This suggests that fathers may be more emotionally attached to their children if they were at the birth than if they were just on the birth certificate. A number of studies report that men are overjoyed when their infants are born (McLanahan *et al.*, 2001), that new fathers behave in similar ways to mothers when introduced to their newborn infant (Rödholm and Larsson, 1982, quoted in Lamb and Lewis, 2004) and the observed nurturing attentiveness of new fathers may reflect the fact that mothers and fathers experience similar changes in hormonal levels at the time of the birth (Storey *et al.*, 2000). Our evidence suggests that

this attachment exemplified through presence at the birth carries through into infancy even among non-resident fathers. The different patterns with respect to paying maintenance are intriguing and may speak to the importance of having formally acknowledged paternity before a father invests financial resources in a child.

Some studies have found that fathers are more likely to keep in touch and be more involved with sons than daughters, although not consistently so. Much of the research on differential involvement according to the sex of the child is based on the experiences of separated and divorced fathers who have lived with their children, and relates to involvement with children rather than infants (Amato and Gilbreth, 1999). Our examination of whether fathers in the MCS study who had not lived with the mother of their child were more or less likely to be involved with their infant if it was a boy or a girl showed no association between the sex of the baby and the father's degree of involvement.

Overview and conclusions

Nowadays, 40 per cent of children are born outside of marriage and as judged by these data from the Millennium Cohort Study, 15 per cent of children are born to parents who are not in a marital or cohabiting union. This is a new and quite striking development in family life, considering that as recently as the early 1980s the totality of births outside of marriage was around 13 per cent. This analysis has provided insights into the extent to which the fathers in these families are engaged with their offspring at the time they are born and in later infancy. The great majority of the babies born outside of marital and cohabiting unions were unplanned, but one in two of the fathers of these babies acknowledged their fatherhood by being present at the birth and two out of three did so more formally by being included on the child's birth certificate. Presence at the birth and being the formally recorded father were important independent predictors of whether the father subsequently moved in with the mother, and for those fathers who continued to live apart the extent to which they were in contact and involved in their child's life.

By the time the child was nine months old, 24 per cent of the fathers were living with their child either full-time (14 per cent) or part-time (10 per cent), 45 per cent were non-resident but in contact with their child, and 31 per cent had no contact. This latter figure constitutes about 5 per cent of all the babies in the MCS, and the fathers of these children may be permanently lost from their children's lives. At the other end of the spectrum, the fathers who were now living with the mother full-time were as actively engaged in caring for their babies as the fathers who were married or cohabiting from the outset, suggesting that in this domain there may be little negative legacy of precipitated fatherhood.

The over-sampling of ethnic minorities in the MCS allowed the examination of variation in behaviour across ethnic groups, but even so some of the analyses

are based on a small numbers of cases, so we should be cautious about generalising the findings. There was evidence that, relative to White parents, solo mothers of Indian extraction were more likely to have the father of the baby move in, and all these fathers moved in on a full-time basis. In contrast, among Black families of Caribbean origin, relative to White families, the father was less likely to move in with the mother and child, but where they did so this was relatively more likely to be on a part-time basis. This part-time cohabitation may be related to the notion of visiting relationships whereby the male partner does not reside permanently in the household and which are not an insignificant component of partnership behaviour among Black families in the Caribbean (Lightbourne and Singh, 1982). Among the non-resident fathers, there was little variation across the main ethnic groups in the extent to which they were in contact or paid maintenance, but among those in contact the ethnic minority sets of fathers were less likely to see their children on a weekly basis compared with White fathers.

The MCS collected very limited information on non-resident fathers and we have no information on their socio-economic circumstances. However, there is indirect information from this study (and more direct information from others) that such fathers may be more likely to be economically disadvantaged than other fathers. We saw earlier that one in two of the children in the MCS who were born to parents who were neither married nor cohabiting were living in disadvantaged wards at the time of the interview.¹³ There is also evidence from analyses of the NCDS and BCS 70 cohort data that non-partnered fathers are more likely to have had disadvantaged backgrounds (Kiernan, 1997, 2003) and there is ample evidence from the US literature that the partnership and reproductive behaviour of men and their responses to fatherhood are shaped by economic resources (Forste, 2002; McLanahan and Carlson, 2004). Speak *et al.* (1997) in their in-depth study of young single fathers in Newcastle highlighted the interconnections between work and family life, and how economic marginalisation can affect family obligations. Thus, socio-economic disadvantage may well be an important factor in preventing these fathers from assuming their parental role and continuing to be involved in their children's lives. Elder (1985) has suggested that men who become fathers but lack the financial resources to provide for a family experience role strain or conflict, with disparities between expectations and resources possibly resulting in a loss of control over one's life, which requires adaptation to restore control. If access to resources is limited then control may be more readily regained by avoiding family obligations. Mothers may also prefer lone motherhood to living with a man on whom they are uncertain they can rely for financial support (Smart and Stevens, 2000). It may be that poorly endowed parents prefer or may be constrained to live apart, which limits a father's parenting opportunities.

The MCS study has provided indications that relationships between new parents are complex, diverse and fluid, and simple dichotomies of two-parent and one-parent households no longer suffice to capture the variety of family

situations. With the growth in non-marital childbearing and parental separation, what might be described as ‘extra-mural’ families and cross-household parenting have become more common, and there are revolving doors to family life with many parents and children living together only some of the time. These developments pose a challenge to conventional methods of data collection that have been largely household based.

This study has provided some statistical visibility but limited descriptive information on non-partnered and non-residential fatherhood. Why some of these ‘separate’ fathers choose to be involved parents, whereas other men who are aware of their paternity avoid parental obligations from the outset cannot be answered from this particular study, nor can we provide insights into the extent to which either lack of co-residence or lack of involvement arises from choice, constraints or contingencies. The MCS has highlighted the diversity and volatility in family situations that prevail at the time a child is born and in later infancy, and provided new information on solo parenthood. If solo mothers and their children are to be supported, we need a clearer understanding of the role that these new fathers play, which includes their reactions to fatherhood and what might help or prevent their positive involvement in their child’s upbringing. The other intriguing question that also remains unanswered is why this form of fatherhood is much more prevalent in Britain than in other European countries.

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Notes

- 1 All the interviews took place when the baby was between nine and 11 months old, but the great majority of the babies were nine months old at the time of the interview.
- 2 About a half of these solo mothers were in a relationship with the father (Kiernan and Smith, 2003), and some may well have been living together on a part-time basis. As we discuss in the concluding section, links between parents have become increasingly fuzzy and complex and do not fit readily into conventional classifications.
- 3 ‘Moved in’ is an imprecise concept as no information was collected on whether the father moved in with the mother or vice versa.
- 4 All of the information on non-resident fathers including that on whether the father was present at the birth and whether they were included on the child’s birth certificate was provided by the mothers as, unfortunately, non-resident fathers were not included in the study due to lack of resources.
- 5 For more details on comparisons between these types of families, see Kiernan and Smith (2003).
- 6 The question included in the MCS study was whether the father’s name was on the birth certificate. However, this does not imply that the birth was jointly registered. Mothers can

give the child the same surname as the father without his presence or permission. A project by One plus One who have been working with Registrars on this topic has found that some mothers regard this as acknowledging the father or identifying that the father is not unknown. Registrars also report that the families of new parents often put pressure on the father to attend so that the child's certificate has information in the section about the father, and thus the child is not regarded as being fatherless (Personal Communication, Penny Mansfield, One plus One).

- 7 Information on whether the father was living there part-time was not precisely measured by, for example, recording the number of days he was present. It was derived from a check question asked for the purposes of locating the father for a possible interview and was asked of mothers where the father was not included in the household grid. The question was as follows: 'We would like to interview the baby's father if he ever lives here, so can I check, does he live here at all, even if it's only for one or two days a week?' Here we made use of the affirmative answers to represent part-time residence by the father.
- 8 Information on the father's ethnic group was collected from the mothers where the father was non-resident, whereas co-resident partners of the mother directly supplied information on their ethnic group. However, there was a high non-response rate to the partners' questionnaire, with information missing for 13 per cent of this group. Given this problem for the comparison of non-resident and resident fathers, we use mother's ethnic group, but for the specific analysis of non-resident fathers that follows, we use the information collected on their own ethnic group.
- 9 All the highlighted differences were statistically significant at 0.05 or better.
- 10 Unlike most of the information we have been using so far, this information was collected directly from the fathers living with the mother on either a full- or part-time basis.
- 11 Logistic regression analysis allows us to measure the effect of various factors on, for example, contact and payment. Logistic regression estimates the effect of a factor or variable after taking into account the effects of the other variables in the analysis. It provides an estimate of the probability of a factor occurring when a parent is in a certain group compared to a reference category. This effect is measured in terms of a relative risk ratio for factors that would impact on whether a father is in contact with his child. Each relative risk ratio predicts the odds of a parent being in a specific group as compared to a baseline group. The baseline groups are those shown first in the set, or where it is a dummy variable the converse is the baseline category. Positive associations are shown by odds ratios of over 1, and ratios less than 1 the reverse.
- 12 The 'Other' category includes fathers of other non-White backgrounds including those of Chinese origins.
- 13 We do not have this information for the time of the birth and it is possible that some parents may have moved into wards with high levels of poverty after the birth and as a consequence of the birth.

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