

# Mothers, parenting and the impact of separation

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## Contents

<b>1. Introduction</b> .....	1
1.1 Impacts of separation .....	1
1.2 Duration of impact .....	2
1.3 Research gaps.....	3
<b>2. Data and analysis</b> .....	4
2.1 Data .....	4
2.2 Sample.....	5
2.3 Variables .....	6
2.4 Analytical approach .....	7
<b>3. Results</b> .....	9
3.1 Parenting competence and separation.....	9
3.2 Separation and the development of parenting competence over time .....	14
3.3 Variation in parenting competence among separated mothers .....	17
<b>4. Conclusions</b> .....	20
<b>5. References</b> .....	21
<b>6. Appendix</b> .....	24

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## **Editorial note**

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The research project made use of surveys 1-4 of the Millennium Cohort Study ([www.cls.ioe.ac.uk/mcs](http://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**

This paper investigates the impact of separation on mothers' perception of their competence as parents. Using the Millennium Cohort Study (MCS), a largescale nationally representative cohort study of children born in the UK in 2000-2001, we investigate the development of evaluations of parenting competence among a sample of 12,000 mothers who were living with the child's father when the baby was age nine months old. Specifically we ask, is parenting evaluation lower among those approximately 2000 mothers who separate compared to those who remain intact at each of three subsequent surveys at ages 3 5 and 7 years old. We look at the extent to which any negative impact of separation can be accounted for by the impact on maternal mental health or child's behaviour. We also investigate whether parenting competence tends to recover with time since separation, and whether it is positively affected by the frequency of the child's contact with his or her father. We find that mothers' perceived parenting competence is negatively affected by separation; but this can be accounted for by the impact of separation on children's behaviour and/or mother's mental health. By contrast with studies of mental health, among separated mothers we find no evidence recovery over time.

Key words: mothers, separation, parenting competence, maternal mental health, Millennium Cohort Study

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# 1. Introduction

## 1.1 *Impacts of separation*

Policy interest in separation has predominantly been driven by the (perceived) negative outcomes for the children involved. Children whose parents have divorced 'score lower on a variety of emotional, behavioural, social, health and academic outcomes' than children of continuously married couples (Amato, 2010; p. 653, see also Mooney et al., 2009). However, it seems that children show relatively little change if their parents divorce from a high-conflict marriage, and that their outcomes can and do improve over time (Mooney et al., 2009). More recent research based on a number of cohort studies challenges this view and suggests that there are very limited effects on the cognitive outcomes of children who experienced parental separation though there are negative emotional outcomes (Harkness, 2015). While Mooney et al. (2009) argue that we should move away from a focus on family form to family functioning, Harkness (2015) suggests we should pay closer attention to the timing of transitions in combination with other (socio-economic) characteristics rather than simply parental separations.

There has been a complementary strand of research looking at the effects of partnership dissolution on adult and family outcomes. In the UK, much of this has focused on the financial impact of separation on families with children both immediately after the separation and in the intermediate term (Brewer and Nandi 2014; Jenkins 2009, Jenkins 2011). This has demonstrated the economic impacts of separation on families with children specifically, as well as on partnerships that do not involve dependants. The review by Mooney et al. (2009) highlights the impact of divorce on the mental health of mothers, particularly an increase in depression (see also Brewer and Nandi 2014).

Smith in her review of the research on the effects of maternal mental health problems on their parenting ability, argues that the officially diagnosed levels of depression are around eight per cent of women of child bearing age but that the levels of depression among mothers with young children have been estimated to be as high as 35 per cent (2004; p.4). Children of mothers with mental health problems have been estimated to be between two to five times as likely to develop behavioural or emotional problems and have a 40 per cent chance of developing depression themselves (Beardsley et al., 1998 and Cummings and Davies, 1994 cited in Smith, 2004; p. 5). There are two mechanisms by which the impact of mental health problems of the mother affects the child, namely directly through her behaviour such as being aggressive and through intermediate factors such as being emotionally withdrawn and uncommunicative (Smith 2004; see also Mooney et al. 2009).

The higher levels of behavioural and emotional problems of children of mothers with mental health problems has sometimes been attributed to distortions in the mother's perception of her child as a result of her own illness. This 'distortion effect', i.e. that mothers suffering from depression are more likely to report behavioural problems of their children, tends to be based on studies, which use only the reports of mothers

rather than studies that compared the assessments of mothers with that of other people such as teachers (see Richters 1992 for a review). When looking at the small number of studies that did compare the reports of mothers with depression and other people, mothers with depression were generally found to be about as accurate in their assessment of the child, i.e. as much in accordance with other people's assessments, as mothers without depression, implying that in fact the distortion effect is not taking place, but instead depressed mothers have an accurate assessment of the behaviour of their children.

While the investigation of maternal depression has focused on the routes by which such health problems might impact child outcomes, including child behaviour, in intact as well as separated families (Kiernan and Huerta 2008), there is some suggestion that separation net of maternal health may be associated with deteriorating a child's behaviour (Joshi et al. 2014). At the same time, it is plausible that any deterioration in children's behaviour consequent on a separation or pre-separation strife may challenge a mother's confidence in her ability as a parent and require additional parenting skills that she feels less well-placed to offer at that time. This suggests a focus on parenting competence itself among separated mothers may be a relevant focus.

However, while extant research documents the impact of separation via the mother on the child, it has less to say directly about how a mother evaluates her own parenting in the face of a separation, particularly in the UK. In the US there have been a small number of studies on the impact of separation on the ability to parent. This is referred to as 'diminished capacity to parent'. The term was originally coined by Wallenstein and Kelly (1980 in Strohschein 2007) and refers to parents being less available and less likely and able to pay attention to their children in the early stage of separation. Though the parenting capacity has been found to return relatively soon after the transition (Hetherington, 1993), in a minority of cases it has been found to last for ten years and more (Wallenstein and Blakeslee 1989 in Strohschein 2007). This leads us to a consideration of the potential duration of the impacts of separation.

## ***1.2 Duration of impact***

There is substantial debate in the literature as to what extent any effects of divorce for adults and children are a short-term crisis, long-term strain or relief (see Kalmijn and Monden, 2006). Mooney et al. (2009) argue that some of the effects are persistent. Amato (2010) goes on to propose a new perspective on divorce, called the 'divorce-stress-adjustment perspective' according to which 'marital dissolution is a process that unfolds over time, beginning when couples get married and ending years after the legal divorce'. Rather than the legal divorce itself, it is the 'short-term stress and long-term strain that precede and follow marital disruption' that is seen as increasing the risk of a number negative outcomes for children (Kalmijn and Amato, p. 656). However, Kalmijn and Monden (2006) in their analysis of the National Survey of Families and Households suggest that divorce may not be the end of high conflict relationships,

which could otherwise fall into the ‘relief’ category mentioned above if children are involved, as the conflict can continue over contact with children (see also Mooney et al., 2009).

Turning to the impacts on financial resources, the research has tended to show an immediate negative impact on the family incomes of women and children but (some) subsequent recovery. A similar pattern, though with a rather swifter ‘recovery’ has also been shown in relation to adults’ mental health. In addition, Brewer and Nandi (2014) demonstrated a similar pattern of an immediate dip but quick recovery for a broader evaluative measure of life satisfaction. Their analysis covered splits of those in various family circumstances, but they were able to show the pattern was consistent across family types including men and women with dependent children prior to separation.

The theme of recovery is also evident elsewhere. Hetherington (2003, cited in Amato, 2010) suggests that divorce affects the ‘psychological, social and physical well-being of adults’ for a short period after the divorce. Most adults then adapt to their new life and only a minority experience long-term impacts (bid, p. 659). However, we have little evidence, in particular for the UK, as to how parenting competence does or does not improve with time since separation.

### **1.3 Research gaps**

To date, research on parenting competence and separation has tended to focus on outcomes in the US and on separations of married rather than cohabiting couples (Amato 2010). Yet with large numbers of cohabiting couples having children, and the greater risks of separation that they face compared to married couples, including cohabiting couples in analysis is crucial for a fuller understanding. We also know that it is not straightforward to extrapolate the situation of lone mothers from the US to the UK, suggesting the need for systematic analysis of parenting competence and separation in this national context to expand our knowledge base. Moreover, while the evidence from the UK might suggest that any negative consequences of separation on the parent with care’s mental wellbeing – and hence any knock-on effects for children of the parent’s state of mind – are potentially rather short lived, we lack clear understanding of whether that pattern is also true for parenting capacity. That is, we do not have a grasp of whether the experience of separation and facing sole responsibility impacts confidence in the ability to parent nor whether, if this is the case, there is a subsequent reversion to earlier levels of perceived confidence or self-evaluated competence, and what might drive such ‘recovery’.

Establishing how self-perceptions of parenting respond to partnership dissolution, is potentially important since parenting competence is itself likely to impact how a parent responds to their children, the consistency of their parenting and potentially how confident they are in engaging or negotiating with others involved in the children’s lives. Changes in perceived competence may stem from the changes in parenting required following a split: the parent with care has to take on a wider range

of tasks, including parenting activities for which (s)he feels less suited and that were previously undertaken more by the child's non-resident parent. She or he may also feel more exposed in her parenting, due to the stigma (Link and Phelan 2001) associated with lone parenthood, particularly in relation to lone mothers, stemming from due to ascriptive attitudes and views that children need two parents in their upbringing (Park et al. 2013). The failure of the relationship may itself be felt to constitute a failure in parenting. Moreover, perceived competence may also reflect changes in the child's behaviour, which create greater challenges for parenting. Perceived self-competence therefore may act as a marker of the extent to which the home environment is more challenging all round, and can also be revealing about those factors that may ease (or perpetuate) such challenges over time.

It is also possible that parents with lower self-competence are also those who are more at risk of a partnership breakdown, as perceived parenting competence may (already) reflect challenging family circumstances that put pressure on the relationship (such as a child with behavioural difficulties; or the parent's mental health problems) or reflect concerns with the relationship or relationship problems (including for example domestic violence) that impact on perceived ability to parent effectively. It is therefore important to factor out the potential selection issue of those parents who go on to separate already having lower parenting competence.

This paper therefore addresses the following specific questions:

1. Does separation negatively impact mothers' perceived parenting competence?
2. If so,
  - a. Does parenting competence recover over time?
  - b. Can any reduction in self-evaluated confidence be linked to other factors that might be expected to influence perceived self-competence, such as maternal mental health, continuing paternal involvement and child behaviour?

## **2. Data and analysis**

### **2.1 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 children's families were first surveyed when the cohort child was aged around nine months. Four further surveys were completed when the cohort children were aged around three, five, seven, and 11 years old. At each of these surveys the main carer (typically, but not always, 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, 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 draw on information from the first four surveys (University of London. Institute of Education. Centre for Longitudinal Studies, 2012a, 2012c, 2012d, 2012b), and on information provided in the main parent interview and self-completion.

## **2.2 Sample**

Our analysis focuses on mothers as these constitute the vast majority of parents with care following a separation involving (young) children. We focus on those mothers who were living in an intact relationship when the cohort child was an infant (around nine months old) and exclude those cases where the mother was not the main carer at this or 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 amounts to around 14,600 mothers at the first 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 gives us a sample of 14,329 singleton MCS children living with both parents at age nine months. We draw on those who were surveyed up to the age 7 survey, since perceived parental competence was not asked at age 11. To ascertain whether or not the mothers separated and their parenting competence, we have to have information from at least one subsequent survey. We therefore have a sample of those who provided information both at age nine months and at least one subsequent survey up to age 7. This gives us a sample of 12,744 mothers: 10,706 mothers who were observed at least twice from the first, nine months, to the age 7 survey and were in an intact relationship when last observed, and 2,038 mothers who experienced a separation by the age 7 survey.

We further restrict our sample to those who completed the self-completion questionnaire administered at one (or more) of the age 3, age 5 and age 7 surveys, since the self-completion questionnaire contains our key measure of parenting competence. Since there was a small amount of non-response on the self-completion element of the questionnaire, we end up with a final sample of results in a sample of 10,106 mothers who are still living with the child's father when last observed and 1,974 mothers who were separated from the child's father by the time they were last observed. For analysis of the impact of separation overall, we compare those mothers who separated with those who remained in intact relationships. For analysis of 'recovery', we restrict our analysis simply to those mothers who experienced a separation at some point between the first and the age 7 survey and provided at least

one evaluation of their parenting competence between the age 3 and age 7 surveys as well as at the age nine months survey. We pool all observations of our two samples in order to be able to track parenting competence across the sweeps and account for within-mother variation in response.

### **2.3 Variables**

Our dependent variable is mothers' perceived self-competence collected at the age 3, age 5 and age 7 surveys. The question wording is 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'. In the descriptive analysis we retain the 'can't say' category as it may itself indicate some uncertainty about parenting competence; but for the multivariate analysis these responses, representing around 1 per cent of respondents, are excluded.

Our key independent variables is whether or not the mother has separated at the time that parenting competence is measured.

We also investigate how far the child's behaviour (measured using the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 2001)) and maternal mental health (measured with the Kessler scale (Kessler et al., 2002)) mediate the relationship between separation and perceived parenting competence, using time varying measures.

Among separated mothers, we construct a measure of time since separation, using the retrospective information on partnership history collected at each survey. For the analysis of mothers who experience separation, we also include a measure of how frequently the child has contact with their absent parent on a scale ranging from 1 (never) to 7 (every day).

We include a number of controls for characteristics that we expect to be associated with both evaluations of parenting competence and risks of separation. These comprise mother's age at the birth of the cohort child and her ethnic group (in six categories), as well as child's sex. We also include a set of characteristics measured at the initial (age nine months) survey: educational level (grouped into degree or above, A' level/diploma, O' level / GCSE at grades A-C, O' level at lower grades or other qualifications, and no qualifications), whether the mother was married to or cohabiting with the child's father, housing tenure (measured as owned or buying, social rented, private rented and other), and employment status. These are indicated as being associated both with separation and its consequences (see the discussion in Brewer and Nandi 2014), and hence adjust our analysis for the greater probability of mothers with certain characteristics to separate and to rank their parenting lower or higher than the average. Other than those factors we expect to mediate parenting competence, i.e. child's behaviour and maternal mental health, we explicitly do not include any

measures that are measured post-separation since they might confound the relationships we are assessing.

We also control for initial (pre-separation or risk of separation) parenting competence. At nine months, this was measured using a slightly different question, namely, ‘When I am caring for [*child*], I feel...1 ...very incompetent and lacking in confidence; 2 fairly incompetent and lacking in confidence; 3 fairly competent and confident; 4 very competent and confident; 5 Can’t say’. Again, in the descriptive exploration of whether there are pre-separation differences in parenting competence between mothers who separate and those who do not, we retain the ‘can’t say’ category, while in the multivariate analysis, we treat it as a continuous variable and exclude these (small number of) responses.

Descriptives of all variables used in analysis in the pooled analytic samples separated by observations relating to not-separated mothers and separated mothers are provided in the Appendix, Table A1. The descriptives are unweighted.

#### **2.4 Analytical approach**

First we inspect whether from the outset there is any difference in the perceived parenting competence of mothers who would later separate compared to those who would stay together, adjusting for survey design. Given that mothers who later separate could be expected to differ in ways that are relevant to the analysis, we also investigate whether mothers who do and do not separate are comparable in their parenting evaluation once we take into account other factors that may be linked to both separation and to parenting evaluation.

This provides the basis for exploring whether mothers who do subsequently separate experience a lower evaluation of their parenting confidence following the separation than mothers who do not separate, and, whether there is any apparent recovery by subsequent surveys. Initial descriptive analysis compares mean parenting competence score and the distribution of parenting competence across intact and separated mothers. Specifically, we make the following comparisons:

- a) for each of the age 3, age 5 and age 7 surveys, those mothers whose relationship has remained intact between the last and the current survey with those mothers who experienced separation between the last and the current survey
- b) for the age 5 and age 7 surveys, those whose relationship had remained intact up to this point with those who had separated between the previous and the current survey and those who had separated at an earlier point, to ascertain if there is apparent recovery.

We then move on to a more systematic consideration of the evolution of parenting competence across mothers and whether it differs for those who separate using linear growth models (Rabe-Hesketh and Skrondal, 2012). This analytic technique allows us to exploit the parenting competence information provided by mothers at different

times – and at different ages of the child, and adjust our results for between- and within-mother random differences, while controlling for relevant covariates. We estimate the impact of separation at the point it first occurred and for all subsequent separated measurement occasions. Prior to separation, the scores of mothers who subsequently separate contribute to the estimation of intact families. In this analysis, level 1 represents within-mother change in parenting competence over the period that the child is aged 3 to 7, and level 2 represents the between-mother variation in parenting competence (random intercept). We included a fixed quadratic on age to account for non-linear development of parenting competence over the child’s early years.

The composite model can be written as follows:

$$\text{Parenting competence}_{ij} = (b_{00} + b_{10}\text{AGE}_{ij} + b_{20}\text{AGE}_{ij}^2 + b_{01}\text{separated}_i + b_{02-x}\text{mother and child characteristics}_i) + (u_{0i} + u_{1i}\text{AGE}_{ij} + e_{ij})$$

The components in the first set of brackets represent the fixed effects part of the model, and the components in the second set of brackets represent the random intercept and linear slope for each mother. Likelihood ratio tests supported the inclusion of a random slope as well as a random intercept, and allowing the covariance to be correlated. The growth curve models were estimated using the mixed procedure in Stata version 13.1 (Rabe-Hesketh and Skrondal 2012).

We initially test for the impact of separation on perceived parenting competence incorporating the full suite of controls, as specified in the previous section, alongside the random intercept and slope and the measure of whether or not separated. We then explore those factors that might be considered relevant for the relationship between separation and perceived parenting competence, namely maternal mental health, and child behaviour.

We then focus our analysis on just those mothers known to separate at some point. This enables us to consider how far the time since separation, within the relatively short time span available for this study, impacts parenting evaluation – i.e. whether greater time since separation enhances parenting evaluation among separated mothers compared to those more newly separated, which would suggest ‘recovery’ in parenting competence. We estimate further growth curve models to evaluate the impact of time since separation. We additionally explore, conditioning on time since separation, how far (the child’s) contact with the absent parent as well as the other factors included in the previous models (initial evaluation of competence, mental health/depression and child’s behaviour) help to account for differences in perceived competence *among* separated mothers.

All analyses adjust for the complex survey design of the MCS. For the initial univariate and multivariate analyses we adjust for clustering, stratification and non-response using Stata’s svy suite of commands. For the growth curve analysis, we cluster on the cluster variable and include the strata variables as additional control variables.

### 3. Results

#### 3.1 Parenting competence and separation

Table 1 shows the mean wave 1 parenting competence and distribution of responses across the categories for those who remained in intact families compared to those who had separated by the time of the age 7 survey. As it shows, there are no statistically significant differences in initial parenting confidence among those who separate compared to those who do not. That is, it is not less confident parents who subsequently go on to separate in the early years

**Table 1: Mean parenting competence score at first survey and distribution of responses, by mother’s subsequent separation status**

	Mothers in families that remain intact	Mothers who go on to separate
Mean parenting score at nine months survey (95% confidence intervals)	3.68 (3.66-3.69)	3.70 (3.67-3.73)
Distribution of responses; p value (adjusted for design)=0.13		
...very incompetent and lacking in confidence (1)	1.1	1.3
fairly incompetent and lacking in confidence (2)	1.0	0.9
fairly competent and confident (3)	27.0	24.0
very competent and confident (4)	70.0	72.0
Can’t say (5)	1.0	1.3
N (100%)	10396	2000

Source: MCS, sweeps 1-4: age nine months, 3 years, five years and seven years surveys (University of London 2012a, b, c, d). The P-value is from a chi<sup>2</sup> test of parenting competence by separation status.

This finding is reinforced by multivariate analysis, which controls for factors that may be relevant for both parenting confidence and subsequent separation, but which reveals no difference in parenting confidence between those who subsequently separate and those who do not (see Appendix, Table A2).

We next turn to how parenting confidence differs between those in intact families and those who have experienced a separation prior to the most recent interview. Table 2 compares, for each of the surveys, the perceived competence of mothers who were living in families that were intact at the previous survey and remained so and that of mothers who were living in families that were intact at the previous survey but had separated by the current one. As with Table 1, we provide both the mean parenting score and the distribution of responses across the variables.

While the differences are not substantial it would appear that separated parents do indeed have reduced perceptions of their parenting competence compared to their counterparts in families that have remained intact, particularly those who separated between the second (age 3) and third (age 5) surveys.

It is possible that the characteristics of those who separate at these different ages are part of the reason for some of these differences. We therefore extend the analysis in the next section to address whether the differences in parenting competence by separation status showed consistent results when controlling for relevant prior factors. Moreover, we also posited that the impact on parenting competence may be an indicator of other factors linked to separation and that provide a reduction in parental confidence. One of these relates to the mental health of the mother herself, which is well-attested in the literature to be impacted by separation and has also been linked to parenting behaviours (Kiernan and Huerta, 2008) – though not explicitly to parenting competence. The second factor that may impact a mother’s perception of her competence is the child’s behaviour, which, if it worsens following – and potentially in response to (Joshi et al. 2014)—a separation, may reasonably give her cause to question her parenting skills. We know that both these factors are negatively correlated with perceived parenting competence (correlation coefficient of around - 0.25), hence they may plausibly account for *why* parents may adjudge their parenting skills to be worse, following separation, if these factors so closely implicated in perceptions of parenting competence also worsen.

Both maternal depression (evaluated using the Kessler scale) and child behaviour (evaluated through parental report in response to the Strengths and Difficulties Questionnaire [SDQ], were first measured from the age 3 survey. We therefore do not have a measure of these preceding the first point at risk of separation in our sample. Nevertheless we can still compare intact families with those yet to separate, as well as those already separated at each survey. Table 3 illustrates, in the top panel, the comparative maternal depression (Kessler) scores among children in intact, separated and yet to separate families; while the bottom panel illustrates children’s behavioural problem (SDQ) scores.

**Table 2: Parenting competence by separation status and survey**

	Intact age 3 years	Separated age 3 years	Intact age 5 years	Separated age 5 years	Intact age 7 years	Separated age 7 years
Mean parenting competence	3.89 (3.87- 3.91)	3.84 (3.77-3.91)	3.90 (3.87- 3.92)	3.69 (3.60-3.78)	3.96 (3.93- 3.98)	3.93 (3.82-4.04)
Distribution of responses	P value= 0.008		P value=0.000		P value=0.005	
Not very good at being a parent	0.2	0.5	0.3	0.5	0.2	1.4
A person who has trouble being a parent	2.3	3.6	2.6	7.7	2.0	2.6
An average parent	37.0	38.6	34.8	38.8	32.7	32.3
A better than average parent	28.1	24.1	31.4	27.0	31.7	28.8
A very good parent	31.5	31.6	30.4	25.2	33.1	34.9
Can't say	0.9	1.7	0.5	0.9	0.3	0.0
N (=100%)	9701	794	8541	540	7810	422

Source: MCS, sweeps 1-4: age nine months, 3 years, five years and seven years surveys (University of London 2012a, b, c, d). Note 'intact' includes those who were known to have remained intact since the last survey while 'separated' is those who have separated since the last survey. The P-value is that from a  $\chi^2$  test of the distribution of parenting response by separation status.

**Table 3: Comparison of Maternal Depression and Child Behavioural Difficulties by Separation Status**

	Age 3 survey	Age 5 survey	Age 7 survey
<b><i>Maternal Depression (Kessler): score (SE)</i></b>			
Not separated by age 7	2.52 (0.04)	2.57 (0.04)	2.51 (0.05)
Separated by this age	3.84 (0.17)	3.90 (0.13)	3.89 (0.12)
Separates in future (by age 7)	3.52 (0.14)	3.54 (0.27)	N/A
N	11566	11241	10259
<b><i>Child behavioural difficulties (SDQ): score (SE)</i></b>			
Not separated by age 7	8.75 (0.08)	6.46 (0.07)	6.55 (0.08)
Separated by this age	10.40 (0.26)	8.16 (0.16)	8.44 (0.16)
Separates in future (by age 7)	9.70 (0.18)	7.22 (0.28)	N/A
N	10938	11398	10207

Source: MCS, sweeps 1-4: age nine months, 3 years, five years and seven years surveys (University of London 2012a, b, c, d).

As we see from Table 3, both maternal depression and child behavioural difficulties are statistically significantly higher among those families who have separated, compared to continuously intact families. However, they are also higher among those mothers and children who have yet to experience separation, but will do by a subsequent survey, even so not as high as for those who have already separated. This may indicate both anticipatory features of an impending separation or proximate causes. However, our concern here is with how these factors might relate to potential reduction in parenting competence following separation. Given that the scores for both depression and child behavioural difficulties are already somewhat higher among families yet to experience separation, it is not clear from these patterns, whether they can account for deterioration in perceived parenting competence at the point of separation, relative to previously intact families. We address this issue in the multivariate analysis where we test whether they help to account for any differences in parenting competence between intact and separated mothers. First, however, we briefly describe patterns of ‘recovery’ over time across the surveys.

Table 4 compares the perceived competence of mothers at the age 5 survey who have separated either by age 3 or more recently between ages 3 and 5. Similarly it shows the perceived competence at the age 7 survey of those who have separated by age 3, by age 5 or more recently by age 7. Since we have already identified that perceived parenting competence at age 7 among those separated is relatively high, we do not expect to see clearly signs of ‘recovery’ in this comparison. However, even among those evaluated at age 5, compared with the patterns in Table 2 there are few clear indications of ‘recovery’ over time. The patterns across the different sets of circumstances do, however, differ significantly from each other.

**Table 4: Parenting competence at age 5 and age 7 surveys by timing of separation compared to intact families**

	Parenting competence at age 5 (P-value-0.000)			Parenting competence at age 7 (P-value-0.000)			
	Intact families	Separated age 3	by Separated age 3-5	Intact families	Separated age 3	Separated age 3-5	Separated age 5-7
Not very good at being a parent	0.3	0.4	0.5	0.2	0.9	0.4	1.4
A person who has trouble being a parent	2.6	4.4	7.7	2.1	5.5	5.1	2.6
An average parent	34.7	37.4	38.8	32.7	35.2	38.7	32.3
A better than average parent	30.9	26.4	27.0	31.3	26.5	25.0	28.8
A very good parent	31.0	30.3	25.2	33.4	31.7	29.5	34.9
Can't say	0.5	1.0	0.9	0.3	0.2	1.3	0.0
N (=100%)	9239	620	540	8132	621	469	422

Source: MCS, sweeps 1-4: age nine months, 3 years, five years and seven years surveys (University of London 2012a, b, c, d). P-value is that from a Chi<sup>2</sup> test of parenting competence by separation status.

### ***3.2 Separation and the development of parenting competence over time***

We next turn to a more systematic analysis of parenting evaluation as it relates to separation taking into account the time of the separation in terms of the age of the child as well as allowing for individual level variation in the relationship between reporting of competence and how it evolves over time. In Table 5, we report the results from mixed linear growth model analysis of self-evaluated parenting competence. Table 5 shows the results for the relationship between separation and parenting competence in a series of models that add in potential (time varying) mediating factors, namely maternal mental health, and the child's behaviour (total difficulties) score.

The first model shows that, net of the control variables, there is a strong and statistically significant relationship between separation and a mother's evaluation of her parenting competence. Figure 1 illustrates the results from this initial model. It clearly shows that those who separate have lower self-evaluated parenting competence across the range of the child's ages at which the competence is reported, even though perceived parenting competence itself varies with age in a non-linear fashion.

We also see some interesting patterns in relation to certain of the control variables. Mothers who were not in work when the child was aged nine months, show substantially greater confidence in their parenting abilities at subsequent ages, when controlling for other socio-demographic factors such as age at birth of child and educational qualifications, and for evaluated competence at that first survey. This aligns with the complex relationship attested in the literature between maternal employment and child outcomes (see e.g. the review in Stewart forthcoming), though in this case it is linked to mother's confidence instead. We also find, consistent with other research using these data that there are ethnic differences in evaluated parenting competence, net of other characteristics (Jones and Smith 2008). Cohabiting mothers are also less likely to evaluate their parenting positively, a finding that is consistent across all four specifications, suggesting that normative attitudes towards marriage may still exert some influence on how mothers evaluate themselves.

**Table 5: Fixed and random effects estimates from multi-level mixed effects linear regression of perceived parenting competence among mothers**

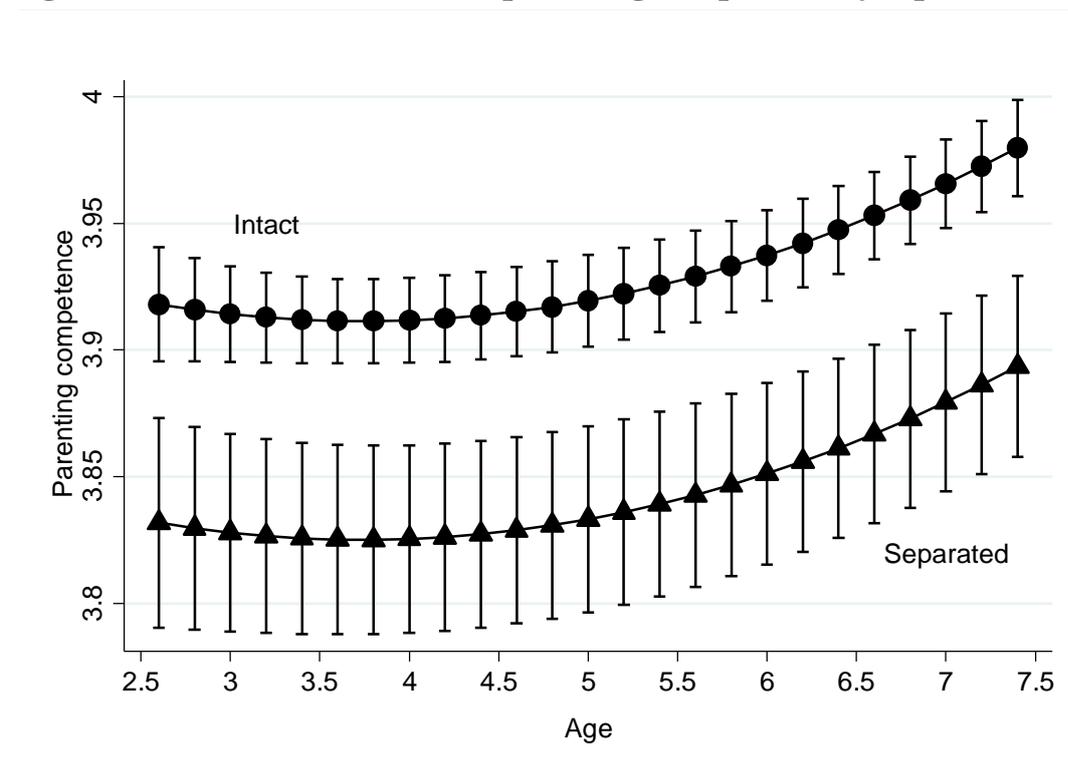
	1) Separation plus controls	2) plus Kessler depress- ion scale	3) plus SDQ	4) full (Kessler & SDQ)
<b>Fixed effects parameters</b>				
Child age	-0.038* (0.017)	-0.047** (0.017)	-0.144** (0.017)	-0.131** (0.017)
Age squared	0.005** (0.002)	0.00573** (0.002)	0.0137** (0.002)	0.0125** (0.002)
Separated	-0.054** (0.019)	-0.017 (0.019)	-0.030 (0.019)	-0.003 (0.018)
Competence at first survey	0.277** (0.018)	0.230** (0.016)	0.242** (0.017)	0.209** (0.016)
Maternal age at birth	0.001 (0.002)	0.001 (0.002)	-0.000 (0.002)	-0.000 (0.002)
Maternal qualifications (ref=O level A-C)				
Degree or higher	0.016 (0.019)	0.010 (0.019)	-0.026 (0.019)	-0.023 (0.019)
A levels / diploma	0.009 (0.019)	0.004 (0.018)	-0.011 (0.019)	-0.011 (0.018)
O levels D-G or other qualifications	-0.032 (0.024)	-0.026 (0.023)	-0.010 (0.023)	-0.009 (0.023)
No qualifications	0.052 (0.028)	0.070** (0.027)	0.100** (0.027)	0.106** (0.027)
Cohabiting (ref = married)	-0.052** (0.016)	-0.041** (0.016)	-0.039* (0.016)	-0.032* (0.016)
Child is girl (ref=boy)	0.045** (0.014)	0.038** (0.013)	0.006 (0.014)	0.008 (0.013)
Number of siblings	-0.026** (0.008)	-0.019* (0.008)	-0.027** (0.009)	-0.021* (0.008)
Mother has long- term illness or disability	0.036* (0.017)	-0.011 (0.017)	0.014 (0.017)	-0.021 (0.016)
Mother not in work at first survey (reference in work)	0.058** (0.017)	0.072** (0.016)	0.063** (0.017)	0.074** (0.016)
Housing tenure (ref=owns/buying)				
Social housing	-0.087** (0.023)	-0.050* (0.022)	-0.046* (0.022)	-0.023 (0.021)
Private rental	-0.071* (0.032)	-0.024 (0.031)	-0.043 (0.032)	-0.009 (0.031)
Other	-0.027 (0.043)	-0.002 (0.041)	0.003 (0.042)	0.019 (0.041)
Ethnic group (ref=White)				
Mixed groups	0.061 (0.089)	0.077 (0.094)	0.071 (0.090)	0.083 (0.094)

Indian	0.140** (0.047)	0.170** (0.045)	0.162** (0.048)	0.182** (0.046)
Pakistani or Bangladeshi	0.290** (0.043)	0.316** (0.039)	0.335** (0.042)	0.347** (0.039)
Black groups	0.370** (0.059)	0.370** (0.055)	0.349** (0.057)	0.353** (0.055)
Other	0.268** (0.065)	0.308** (0.066)	0.282** (0.065)	0.313** (0.067)
Maternal depression score		-0.048** (0.002)		-0.040** (0.002)
Child behaviour (total difficulties)			-0.033** (0.001)	-0.026** (0.001)
Constant	2.879** (0.075)	3.223** (0.072)	3.571** (0.076)	3.722** (0.072)
<b>Random effects parameters</b>				
Level 2 (mother)				
Intercept variance	0.584** (0.037)	0.527** (0.035)	0.536** (0.034)	0.498** (0.033)
Slope variance	0.007** (0.001)	0.006** (0.001)	0.007** (0.001)	0.006** (0.001)
Covariance	-0.036** (0.006)	-0.305** (0.006)	-0.033** (0.006)	-0.025** (0.006)
Level 1 (survey)				
Residual variance	0.345** (0.008)	0.342** (0.008)	0.339** (0.008)	0.337** (0.008)
<i>N (person- surveys)</i>			29646	

Source: MCS, sweeps 1-4: age nine months, 3 years, five years and seven years surveys (University of London 2012a, b, c, d). Notes: Standard errors in parentheses. \*  $p < 0.05$ , \*\*  $p < 0.01$ . Analysis additionally controls for MCS sample strata and clusters on sample clusters. The 29647 person-surveys come from observations on 12,080 mothers.

The subsequent models in Table 5 illustrate that the impact of separation is rendered non-significant when either maternal depression or children's behaviour is included in the model. As we know from other research (Kiernan and Huerta, 2008), maternal depression itself can be implicated in children's behaviour; yet, as we see from model 4, it is not simply that behaviour and depression are substitutes since they both retain statistically significant associations with parenting competence when entered together. What we see therefore is that separation is likely to go hand in hand with higher rates of maternal depression and with higher rates of child behavioural problems, and that either of these results in a reduced evaluation of parenting competence.

**Figure 1: Mother’s evaluation of parenting competence by separation status**



Source: MCS, sweeps 1-4: age nine months, 3 years, five years and seven years surveys (University of London 2012a, b, c, d). Notes: Results mixed model with random intercept and random slope for age of child, at mean values of other covariates.

### 3.3 Variation in parenting competence among separated mothers

We now turn to differences among separated mothers. We first explore whether time since separation makes a difference among mothers who have separated. We then investigate how far contact with the non-resident parent influences parenting competence among separated mothers. Given time since separation is correlated with the child’s increasing age (a correlation coefficient of around 0.5), but, as we saw, child’s age is also associated with different levels of perceived parenting competence, when estimating the impact of time since separation, we initially tested whether there was an effect excluding child’s age, and then included child’s age centred at the mean age within the observation window in years (around 5.2 years).

In fact, by contrast with the literature on separation and mental health and on life satisfaction, we saw no improvement in perceived parenting competence among separated mothers over time, whether or not we controlled for child’s age. That is, mothers who had been separated for longer did not tend to have higher parenting competence compared to mothers who had been separated more recently. This can be seen in Table 6. It may be that this is partly a consequence of the relatively short time span since separation within our sample, with an average of only 2.7 years since separation across the mothers. However, replicating the analysis with depression as the dependent variable indicated that among separated mothers, the level of depression was sensitive to the time since separation, decreasing over time since separation, other

things being equal (See Appendix, Table A3). Hence, the pattern for depression is consistent with other research, while parenting competence shows little variation with time since separation.

**Table 6: Fixed and random effects estimates from multi-level mixed effects linear regression of perceived parenting competence among separated mothers**

	(1) time since separation plus controls	(2) plus categorical age	(3) plus child's contact with absent parent	(4) plus Kessler & SDQ
Fixed effects parameters				
Time since separation	0.001 (0.001)	-0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)
Child's age		0.014 (0.012)	0.014 (0.012)	0.006 (0.012)
Competence at first survey	0.219** (0.041)	0.220** (0.041)	0.219** (0.041)	0.136** (0.038)
Maternal age at birth	0.007 (0.005)	0.006 (0.005)	0.006 (0.005)	0.006 (0.005)
Maternal qualifications (ref=O level A-C)				
Degree or higher	0.059 (0.073)	0.055 (0.073)	0.054 (0.073)	0.022 (0.069)
A levels / diploma	0.089 (0.054)	0.086 (0.054)	0.087 (0.054)	0.044 (0.053)
O levels D-G or other	-0.056 (0.060)	-0.060 (0.060)	-0.061 (0.060)	-0.028 (0.060)
None	-0.096 (0.060)	-0.096 (0.060)	-0.098 (0.060)	-0.048 (0.058)
Cohabiting (ref.=married)	-0.050 (0.045)	-0.044 (0.045)	-0.045 (0.045)	-0.027 (0.044)
Child is girl (ref.=boy)	0.034 (0.037)	0.034 (0.037)	0.035 (0.037)	-0.002 (0.034)
Number of siblings	-0.031 (0.024)	-0.031 (0.024)	-0.031 (0.024)	-0.015 (0.023)
Mother has long-term illness or disability	0.001 (0.047)	-0.000 (0.047)	-0.000 (0.047)	-0.057 (0.044)
Mother not in work at first survey (ref.=in work / on leave)	0.142** (0.041)	0.142** (0.041)	0.144** (0.041)	0.172** (0.038)
Housing tenure (ref=owns / buying)				
Social housing	-0.115* (0.051)	-0.110* (0.051)	-0.107* (0.052)	-0.0526 (0.049)
Private rental	-0.038 (0.070)	-0.032 (0.070)	-0.027 (0.071)	-0.006 (0.071)
Other	0.022	0.022	0.024	0.069

	(0.112)	(0.112)	(0.112)	(0.112)
Ethnic group (ref=White)				
Mixed groups	0.019 (0.175)	0.023 (0.175)	0.024 (0.175)	-0.054 (0.177)
Indian	0.140 (0.276)	0.138 (0.273)	0.143 (0.273)	0.366 (0.310)
Pakistani or Bangladeshi	0.612** (0.134)	0.612** (0.133)	0.621** (0.136)	0.560** (0.148)
Black groups	0.429** (0.125)	0.432** (0.125)	0.430** (0.125)	0.365** (0.113)
Other ethnic group	0.199 (0.182)	0.216 (0.182)	0.216 (0.182)	0.232 (0.187)
Child's contact with absent parent			0.008 (0.010)	0.006 (0.010)
Child behaviour (total difficulties)				-0.024** (0.004)
Maternal depression score				-0.047** (0.005)
Constant	2.955** (0.156)	2.967** (0.156)	2.936** (0.160)	3.642** (0.155)
<b>Random effects parameters</b>				
Level 2 (mother)				
Intercept variance	0.528** (0.050)	0.527** (0.050)	0.484** (0.052)	0.448** (0.054)
Slope variance	1.03x10 <sup>-7</sup> ** (3.11x10 <sup>-8</sup> )	1.03x10 <sup>-7</sup> ** (3.11x10 <sup>-8</sup> )	7.57x10 <sup>-8</sup> ** (3.19x10 <sup>-8</sup> )	4.61x10 <sup>-8</sup> ** (2.88x10 <sup>-8</sup> )
Covariance	-0.000** (0.000)	-0.000** (0.000)	-0.000** (0.000)	-0.000** (0.000)
Level 1 (survey)				
Residual variance	0.404** (0.023)	0.404** (0.023)	0.415** (0.024)	0.401** (0.023)
<i>N</i> (person- surveys)	3465			

Source: MCS, sweeps 1-4: age nine months, 3 years, five years and seven years surveys (University of London 2012a, b, c, d). Notes: Standard errors in parentheses. \*  $p < 0.05$ , \*\*  $p < 0.01$ . Analysis additionally controls for MCS sample strata and clusters on sample clusters. Standard errors in parentheses. \*  $p < 0.05$ , \*\*  $p < 0.01$

We also tested for whether level of contact of the absent parent with the cohort child impacted evaluation of parenting competence and again found no relationship. There seems no indication, then, that parenting evaluation recovers from the knock presented by separation, and this may be because of other factors that persist in rendering parenting itself more challenging without the presence of the child's father. At the same time, parenting competence does not seem to be linked to how well contact between the child and their father is maintained. This may be because there are

countervailing influences – on the one hand greater levels of contact may ease parenting challenges on the other hand it may complicate or exacerbate them.

As with the comparison between intact and separated mothers shown in Table 5, we found that maternal mental health and child behaviour had a statistically significant impact on perceived parenting competence, differentiating among separated mothers.

#### **4. Conclusions**

The aim of this paper has been to investigate changes to the perceived parenting competence of mothers who separated from their partner. In particular, the focus has been on whether mothers who subsequently separate are likely to have lower perceived parenting competence than mothers who remain in intact relationships. It posed two main questions: does separation affect perceived self-competence and if so, does it recover over time? Extant literature on parenting competence, which largely derives from the US, suggests that perceived parenting competence tends to be affected by separation on the whole but that it tends to recover not too long thereafter. The analysis in this paper modifies and extends these findings, investigating the UK case. It extends the coverage of existing literature from the US on parenting competence by including both formerly married and cohabiting couples, demonstrating that, while cohabiters tend to have lower evaluations of their parenting, the effects are consistent across married and cohabiting parents. It extends the coverage of the UK literature on the impacts of separation by explicitly focusing on mothers' attitude to their parenting, rather than child outcomes, and conditioning on pre-separation parenting evaluations.

Comparing mothers who will later separate and those who will stay together, when both are living with child's father and when the children are babies aged around nine months, we found that perceived parenting competence did not differ between the two groups. This remains the case also when controlling for factors that might affect separation such as socio-economic characteristics. This suggests that any subsequent patterns of parenting competence can more reliably be linked to the impact of separation (and the surrounding circumstances) rather than to selection effects (less confident mothers being more likely to separate).

Following separation, the perceived parenting competence of mothers does tend to drop compared to their counterparts still in couples. However, once mediating factors such as mental health and/or child behaviours are added to multivariate models, the difference in the perceived parenting competence between mothers who have separated from their partners and those who have not becomes smaller and is no longer statistically significant. In other words, the perceived drop in parenting confidence of mothers following separation seems to be driven more strongly by other factors also associated with separation, and that are linked to reduced parenting capacity, namely depression and the child's behavioural problems. Despite the fact that maternal depression itself is implicated in children's behavioural problems, we

find that both of these potential routes for the impact of separation on parenting competence have strong independent effects.

We also raise the possibility that while child outcomes have typically been envisaged as a consequence of maternal behaviours, worsening behavioural problems among children may also contribute to how parents perceive the challenges of parenting following a separation.

By contrast with existing literature, we do not find evidence for the recovery/adjustment hypothesis, that is, that perceived parenting competence improves with increased time after separation, when we compare separated mothers who split at different periods over the child's early years (ages 3 to 7). We also find no support for our hypothesis that parenting competence will be influenced by the extent of child contact with the absent parent. It is possible that over a longer duration, we might find such effects since we are constrained to a relatively short observation window, but the data do not allow us to test this. We can, though, ascertain that parenting competence is less sensitive to the impact of time since separation than maternal depression, which does show some recovery. This implies that the drop in parenting self-evaluation represents a nexus of factors linked to separation, some of which may operate in competing directions.

In summary, then, separation does appear to affect the perceived parenting capacity of parents but the way it does so would seem to be through enhanced risks of maternal mental ill-health and child behavioural problems. This may suggest that approaches that focus on psychological support for mothers following separation will have positive knock-on effects on their parenting confidence and capacity. While it may be the case that the shocks to maternal parenting exacerbate child behavioural problems, as indicated in the existing literature, and in this analysis, we cannot separate the causal direction, our analysis also invites us to consider how changes in child behaviour consequent on a separation may themselves bring new challenges for parenting. This would imply that addressing children's behavioural problems following – and possibly immediately preceding – separation, for example through school or mediation-linked support, may have positive impacts on maternal parenting capacity in the aftermath of a separation.

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## 6. Appendix

**Table A1: Descriptive statistics from the pooled sample of variables used in analysis by whether or not mother is separated (person-waves)**

	Not separated (N=26069 person waves)	Separated (N=3572 person waves)
Parenting competence	3.93 (0.01)	3.84 (0.02)
Child age	5.09 (0.01)	5.73 (0.83)
Age 9 months perceived competence	3.67 (0.003)	3.70 (0.01)
Mother's age at birth (centred)	0.86 (0.03)	-2.51 (0.10)
<i>Qualifications</i>		
Degree or above	0.23	0.09
A' levels / diploma	0.23	0.17
O' levels / GCSE	0.34	0.43
Less / other	0.11	0.14
None	0.09	0.17
Married	0.75	0.45
Cohabiting	0.25	0.55
Child is a boy	0.51	0.52
Child is a girl	0.49	0.48
Older siblings	0.09 (0.01)	0.90 (0.02)
Mother has long-term limiting illness	0.21	0.25
Mother was in work/ on leave at age nine months	0.59	0.46
Mother was not in work at age 9 months	0.41	0.54
<i>Housing tenure</i>		
Owned / buying	0.77	0.49
Social rented	0.14	0.36
Private rented	0.06	0.11
Other	0.03	0.04
<i>Ethnic group</i>		
White	0.91	0.92
Mixed	0.01	0.01
Indian	0.02	0.01
Pakistani / Bangladeshi	0.04	0.02
Black	0.01	0.03
Other	0.01	0.01
Kessler	2.76 (0.02)	4.13 (0.07)
SDQ	7.39 (0.03)	8.91 (0.09)
<i>Variables in separated parents only analysis (N=3465 person waves)</i>		
Time since separation (years)		2.72 (1.69)
Contact with absent parent		3.54 (0.03)

Source: MCS, sweeps 1-4: age nine months, 3 years, five years and seven years surveys (University of London 2012a, b, c, d). Notes: Means (standard errors) provided for all continuous variables; proportions for categorical variables. Unweighted values.

**Table A2: OLS model of parenting competence at first MCS survey by subsequent separation status and control variables**

	B	SE
Mothers who subsequently separated (ref=remain intact)	0.0106	(0.0153)
Mother's age at birth (centred)	-0.00591***	(0.00111)
Qualifications (ref=degree)		
Higher degree	-0.0184	(0.0281)
Diploma	0.0761***	(0.0201)
A/AS level	0.0553**	(0.0198)
O level / GCSE grades A-C	0.0869***	(0.0148)
O level / GCSE grades D-G	0.0615**	(0.0233)
Other	-0.0437	(0.0458)
None	-0.00298	(0.0245)
Cohabiting (ref=married)	0.0118	(0.0122)
Child sex=girl	0.00877	(0.0101)
Number of siblings of cohort child	0.0672***	(0.00500)
Mother has long-standing illness	0.0824***	(0.0137)
Mother not in work (ref=in work)	-0.0509***	(0.0106)
Housing tenure (ref=owns/buying)		
Renting from LA / HA	-0.0725***	(0.0179)
Private renter	0.00521	(0.0217)
Other	-0.0392	(0.0295)
Ethnic group (ref=White)		
Mixed ethnic groups	-0.0751	(0.0756)
Indian	-0.0474	(0.0464)
Pakistani and Bangladeshi	-0.198***	(0.0326)
Black groups	0.151***	(0.0411)
Other ethnic group	-0.0886	(0.0545)
Constant	3.520***	(0.0282)
<i>N</i>	12187	

Source: MCS, sweeps 1-4: age nine months, 3 years, five years and seven years surveys (University of London 2012a, b, c, d).

Notes: Analysis adjusted for the complex survey design of MCS. Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Table A3: Fixed effects from multi-level mixed effects linear regression of maternal depression (Kessler score) among separated mothers**

	Coefficient	SE
Time since separation (in months)	-0.009*	(0.004)
Child age, centred	0.086	(0.051)
Child behavior (total difficulties)	0.231**	(0.016)
Mother's age (centred)	0.024	(0.020)
Mother's qualifications (ref= O' levels A-C)		
Degree or higher	0.281	(0.285)
A' levels	-0.162	(0.195)
O' levels D-G	0.318	(0.276)
Other or none	0.277	(0.295)
Cohabiting (ref=married)	0.232	(0.189)
Child is a girl (ref=boy)	0.337	(0.182)
Number of siblings at first interview	0.298**	(0.111)
Mother has a long-term illness	-0.546**	(0.206)
Mother not in work a first survey	0.286	(0.191)
Housing tenure (ref=owns/buying)		
Social rented	0.361	(0.243)
Private rented	0.030	(0.289)
Other	0.531	(0.467)
Ethnic group (ref=White)		
Mixed groups	-0.623	(0.728)
Indian	4.263**	(1.324)
Pakistani or Bangladeshi	-0.403	(0.680)
Black groups	-0.426	(0.624)
Other ethnic group	0.794	(0.875)
Constant	1.798**	(0.336)
<i>N (person surveys)</i>	3465	

Source: MCS, sweeps 1-4: age nine months, 3 years, five years and seven years surveys (University of London 2012a, b, c, d). Model additionally controls for MCS strata variable, and clusters on PSU to adjust for design effects. Random effects parameters not illustrated. Standard errors in parentheses \*  $p < 0.05$ , \*\*  $p < 0.01$ . The 3495 person-surveys come from observations on 1,974 mothers.