# Late maternal age and parenting practices 

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#### Abstract

Recent decades have shown a gradual rise in the age at which women give birth to their children in many developed countries. This process of late fertility may have important consequences on parenting. The present study aims to analyse whether and how maternal age influences parenting practices with respect to the presence of parents in their children's daily life. Using data of the 2005 Italian Birth Sample Survey, we refer to the early infancy period and consider three domains of parenting: a) support for the baby's care (grandparents, babysitter, or crèche), b) the mothers' return to work after childbirth, and c) the father's time spent with his child. Results do not support the hypothesis that older parents may be more physically present in the daily life of their infants than the younger ones.


Key words: maternal age, child's care, mother's return to work, fathers' involvement.

## 1. Introduction

Recent decades have been shown a gradual rise in the age at which women give birth to their children in many developed countries. The fraction of all births occurring to women above age 35 is rapidly increasing: in Italy this percentage, which was $18 \%$ in 1998, $25.4 \%$ in 2004, reached $28.4 \%$ in 2007; similarly, the percentages referred to women who give birth above 40 passed from $2.8 \%$ in 1998 , to $4.2 \%$ in 2004 , and reached $5.3 \%$ in 2007. A similar picture is emerging across most of the European countries (Shaw and Giles, 2009).

This process of late fertility has a number of important consequences. Medical researches have frequently emphasised health consequences of late pregnancies, such as high frequency of miscarriages and birth deformations (de La Rochebrochard and Thonneau, 2002). Moreover, older mothers may have a different parenting style with respect to the younger ones. Most of these
differences may depend by structural differences: older mothers are indeed more likely to have higher economic resources (education, labour market experience, and income) at the time of giving birth than younger mothers. However, delayed motherhood has also been associated with a number of advantages such as a sense of maturity. Indeed, older mothers tend to possess more life experience and information and may feel more psychologically ready to assume the responsibilities of childrearing (Shelton and Johnson, 2006). Both medical and psychological aspects of late fertility lead to an interest on the effects of maternal age effects on parenting; but - altough studies suggested that the style of childcare may be associated with intellectual as well social development of children (Melhuish, 2003) - the literature on the association between maternal age and parenting practices is not very rich (Bornstein et al., 2006; Fergusson et al., 2008).

The present study explores the effects of maternal age (in particular, of late maternal age) on a specific aspect of parenting practices: the presence of parents in the daily life of their children. In order to study this behaviour, three domains are considered, namely: a) support for the baby's care (grandparents, babysitter, or crèche), b) the mother's return to work after childbirth, and c) the father's time spent with his child. The reference is the early infancy period: the first years after delivery constitute, indeed, a period of critical adjustment in multiple domains of parenting (Bornstein, 2002).

One hypothesis is that older mothers may be more physically present in the daily life of infants than the younger ones. On the one hand, from a cohort perspective, they may be more wary of involving crèche or other non-relatives, such a baby-sitter, in the care of their children and they may prefer to rely on the assistance of relatives who they know and trust. On the other hand, from an age perspective, older mothers may prefer to personally look after their children. In addition, in these cases, the traditional role of mothers in child-care activities is highly valued. These effects may be particularly true in the case of the first child. Consequently, net of other factors, older mothers are expected to prefer to care their children within their family or their relative network (finding helps from their partner and/or from other relatives, above all, grandparents) and, if they are employed, to return to work after childbirth later. These hypotheses may be however contrasted by other considerations related on the age effects. First, working mothers - especially those who have their first child at older ages - may be less prone to adopt traditional chidcare because presumably selected as less family oriented. Second, older mother - being more autonomous and rich of experience - may have a more pragmatic and less emotional behaviour that makes them less prone to adopt traditional childcares. As a consequence, as regards the support for the baby's care, the age effect might operate in the opposite direction: older women may have less dependent relationships
with their family of origin (particularly with their own mothers) and they may feel that a grandmother's involvement is intrusive, as shown by Fergusson and her colleagues (2008).

Fathers' behaviours are similarly uncertain. From a cohort perspective (which means stronger gender differences for older cohorts), older mothers are expected to have less involved partners, independently of the parity. From an age perspective, however, older fathers may be expected to be more highly involved than the younger ones, particularly in the case of the first child.

## 2. Data and methods

### 2.1 The sample

We use data from the Italian Birth Sample Survey, carried out in Italy in 2005 by the National Statistical Institute (ISTAT), which interviews almost 16,000 mothers about 21-26 months after their childbirth. The survey provides information on the socio-demographic characteristics of the newborn, and his/her parents and on the economic status of the family. In particular, mothers' employment status, formal and informal childcare networks, and the division of household chores after childbearing are investigated. In this way, information on the three domains of parenting mentioned in the Introduction is available.

### 2.2 Measuring the outcomes

## Support for the baby's care

In the questionnaire, the support for the baby's care is investigated through different questions according to mother's employment status at the interview. Employed mothers (at the time of interview) are asked who principally cares for their child when they are at work. Not employed mothers and those who were in maternity leave at the time of the interview are asked whether and how often they happen to involve non-maternal figures in the care of their child; for those who answer their child receives non-maternal care daily or for more days in a week, who is this nonmaternal figure is investigated. In this way, two different categorical variables are used to study the choice of the support for the baby's care. Employed women ( 8,254 observations) are distinguished in three categories: those whose children are principally cared for by a crèche, those who have childcare by a baby-sitter, and those who care their children with the help of their partner and/or of their parents (or other relatives). For women who are not employed ( 6,869 observations) or who are in maternity leave ( 745 observations) at the time of the interview (thus, for 7,614 observations), a different categorization is used: children who are not cared for only by their parents are
distinguished depending on whether they are cared for by their grandparents (or other relatives) or by non-relatives, such as a baby-sitter or a crèche.

## The mother's return to work after childbirth

The question about the return to work after childbirth is referred to mothers who were employed before pregnancy and who are employed or in maternity leave at the time of interview (they total 8,354). They are asked about their children's age at their return to work and they can choose among five categories (with right closed intervals): 3 months or less, 3-6 months, 6-9 months, 9-12 months, and more than 12 months.

This categorization is used also in the following analyses and it was chosen considering the Italian legislation on the maternal leavers. Italian legislation provides for a period of compulsory maternity leave that lasts 5 months, 2 months before and 3 months after the birth (in fact, the Law $53 / 2000$ introduced the flexibility according to which in some cases the maternity leave may be 1 month before and 4 months after the birth). During this compulsory leave the woman is entitled to $80 \%$ of her salary; in the public sector or in large companies the same amount as the usual salary ( $100 \%$ ) is paid. An additional period of optional leave which can last up to 6 months (and which can be taken until the child's 8th birthday) is remunerated at the 30 per cent of earnings (Law 151/2001); again women working in the public sector or in large companies have better conditions, being paid at $100 \%$ of the usual salary in the first of these additional months. Self-employed women have a lower level of protection, with no compulsory leave and only a period of optional leave which can last up to 3 months (and which can be taken until the child's 1st birthday) with a remuneration of $30 \%$ of the usual earning. Workers with fixed term contract are entitled to only the compulsory leave, with a remuneration of $80 \%$ of their salary, but not to any of the optional leaves.

## The father's time spent with his child

Information on the father's time spent with his child is collected only for biological fathers (23 step-fathers are not included in the analyses) cohabiting with their child's mothers ( 413 singlemothers are excluded). Moreover, fathers who are considered for this question are those employed at the interview ( 504 not employed fathers are excluded). In this way, 14,793 observations are the sample of interest for this parenting aspect. It is measured by the hours a father spends on average with his child in a weekday. In this way, the definition of fathers' involvement is limited to the time that requires the physical proximity of the fathers (activities that may entail cognitive or emotional investment of fathers when they are not physically near their child are beyond the scope of this article). In our preliminary analyses (see Table 1) we consider a categorical variable grouping fathers according to they spend: 2 hours or less with their children in a day, from 3 to 4 hours a day,
and spending 5 hours or more; subsequently, in the multivariate models, we use the variable as expressed in the original format (as a number from 0 to 12 ).

### 2.3 Measuring the covariates

## Mother's age at the birth of child

To isolate the effects of maternal age per se, multivariate analyses have been used.
The covariate of interest in this paper is the mother's age at the time of giving birth. It is measured by a categorical variable, considering four age groups: under 29, 30-34, 35-36, and 37 or over. Particular attention has been paid to older age group. This variable is the focus of our study and the other covariates we mentioned in the following are used as controls: in the text we presented results of the effect of this variable on the outcomes of parenting, whereas the complete models are reported in the Appendix.

## Child's parity

Another important covariate is baby's parity. In preliminary analyses (not shown here for space reasons) it was considered as a covariate, since first births are more common among younger mothers (see table 2): they are $69 \%$ among women under $30,44 \%$ among $30-34$, and they decreases to $25 \%$ among women aged 37 or over (conversely, higher order births are more common among older mothers). In this paper, in order to evaluate the interaction effect between age and parity, different models for the first birth and for the second or higher order births were estimated.

## Background covariates

Then, several socio-economic and demographic variables were evaluated as potential covariates (a complete list of all the covariates used as control and of their effects on the outcomes can be found in the models - Tables A1, A2, B, and C, of the Appendix). In particular, in the analyses of the first two aspects of parents' behaviour (those regarding the mothers: the support fort the baby's care and the mother's return to work after childbirth), maternal socio-economic conditions, such as education and employment status, and job's characteristics (for employed mothers) were controlled for. The focus restricted only to maternal characteristics is motivated by the fact that maternal and paternal characteristics are often strongly positively related within families, and so the inclusion of both in the analyses could confound interpretation. In addition, a focus only on maternal characteristics allowed us to consider also mothers with children who have no resident fathers. Instead, in the analysis of father's behaviour, apart from maternal employment status, father's economic condition (education and job's characteristics) was controlled for.

Lastly, in all analyses, some baby's characteristics (age, birth weight and prematurity), the family structure, the economic condition, and the residence region were considered as controls.

Unfortunately we cannot control for the mother's relative network (particularly for presence and availability of both parents and parents-in law) due to the lack of proper data.

### 2.4 Analytical strategy

The support for the baby's care is analysed through multinomial logistic regression models. The estimation of these models is analogous to the simultaneous estimation of several binary logistic models: a set of $J-1$ coefficients is estimated for each explanatory variable, where $J$ equals the number of categories of the dependent variable (thus, here, $J=3$ ). The estimated coefficients indicate the effects of the independent variables on the log-odds (odds when exponentiated) of each outcome category in relation to the reference category. For mothers employed at the time of the interview, the reference category is women whose children are cared by parents and grandparents (or other relatives); for women who are not employed or who are in maternity leave, the reference category is defined by mothers whose children are cared for only by their parents. Models estimation was done with PROC CATMOD in SAS (Allison, 1999).

The children's age at their mothers' return to work is considered through an ordered logit model, which is also known as "proportional odds logistic regression" (Agresti, 2002). It extends logistic regression to handle an ordinal response variable. The dependent variable assumes values ranking between 1 (for mothers who returned to work when their child was less than 3 months) and 5 (for mothers who returned when their child was 12 months or more). Each outcome has its own intercept, but the same regression coefficients. The estimated coefficients indicate the effects of the independent variables on the logarithm of the odds of being in a certain rating or higher, so they describe the probability of returning to work later after childbirth. The estimation was done with PROC LOGISTIC in SAS (Allison, 1999).

Lastly, the hours a father spends on average with his child in a weekday are modelled by a Poisson model (Cameron and Trivedi 1998). The estimated coefficients indicate the effects of the independent variables on the expected number of hours spent on average by the father with his child in a weekday. Again, the estimation was obtained using SAS, in particular, the PROC GENMOD.

## 3. Descriptive analyses

Descriptive analyses show that maternal age influence parenting, especially for some parenting aspects.

Table 1 shows that older working mothers are less likely to involve grandparents in the care of their children and more likely to use a babysitter and a crèche than younger mothers. The situation is obviously completely different among women who are not employed or who are in maternity
leave at the time of interview: most of them do not use any type of child-care. In fact, the percentages of mothers who involve grandparents or other relatives are not negligible, particularly among younger ones: even if the differences with older mothers are not very strong, the choice of grandparents as their children's support is again less common among older mothers. Moreover, it is interesting to note that younger mothers are those who have their children cared for by crèche or baby sitter in the lowest percentages.

As regards the children's age at the return to work, considering, for example, mothers who returned to work when their children were 6 months or less, or those who returned when their children were more than 12 month, we note that older mothers are weakly more prone to return earlier than younger ones.

Lastly, as regards the hours spent by fathers with their children in a weekday, considering fathers who spent, on average, 2 hours or less with their children, we can observe that children of older mothers have fathers who spend less time with them than that of older mothers.

Table 1: Parenting practices according to maternal age.

|  | Under 30 | $30-34$ | $35-36$ | 37 or <br> over | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Support for the baby' care: <br> employed mothers |  |  |  |  |  |
| Crèche | 24.0 | 27.8 | 28.9 | 32.3 | 27.5 |
| Baby-sitter | 3.9 | 7.8 | 10.5 | 17.0 | 8.6 |
| Grandparents and other relatives | 72.1 | 64.4 | 60.6 | 50.7 | 63.9 |
| Total = 100 | 2,801 | 2,890 | 971 | 1,592 | 8,254 |
| Support for the baby' care: <br> Not employed mothers or in maternity leave <br> Parents |  |  |  |  |  |
| Grandparents and other relatives | 85.9 | 84.0 | 85.0 | 88.1 | 85.6 |
| Crèche, baby sitter | 10.5 | 10.8 | 9.3 | 6.7 | 9.9 |
| Total = 100 | 3.6 | 5.2 | 5.7 | 5.2 | 4.5 |
| Child's months at the mother's return to work | 2,088 | 687 | 1,057 | 7,614 |  |
| 3 months or less | 11.1 | 12.7 | 11.5 | 13.5 | 12.2 |
| 3-6 months | 27.4 | 26.9 | 26.6 | 28.7 | 27.4 |
| 6-9 months | 19.8 | 21.8 | 22.0 | 20.9 | 21.0 |
| 9-12 months | 19.1 | 19.5 | 20.9 | 19.3 | 19.5 |
| more than 12 months | 22.6 | 19.1 | 19.0 | 17.6 | 19.9 |
| Total = 100 | 2,690 | 2,984 | 1,025 | 1,655 | 8,354 |
| Father's time spent with his child |  |  |  |  |  |
| 2 or less hours | 18.0 | 21.8 | 25.5 | 27.3 | 21.4 |
| 3-4 hours | 46.0 | 48.2 | 45.4 | 42.2 | 46.3 |
| 5 or more hours | 30.0 | 29.1 | 30.5 | 32.3 |  |
| Total = 100 | 36.0 | 4,784 | 2,510 | 1,240 | 14,793 |

However, these descriptive analyses should be considered with caution. As previously suggested, indeed, socio-demographic and socio-economic factors often confound the associations between maternal age and parenting practices. As table 2 shows, older mothers are indeed more likely to be employed, to have higher occupations, higher education and higher economic resources than younger mothers (and higher resources may, for example, mean more availability of resources for paid childcare services). In fact, their pregnancies have also more problems (percentages of preterm and low birth weight child are higher). Table 2 shows also that, at the opposite, younger mothers are more likely to live in non traditional families, such as single-mothers and cohabiting with their partner. In addition, they presumably have more family childcare resources due to the presence of younger grandparents, but, on the opposite direction, less siblings given the decresing fertility through the birth-cohorts (unfortunately, these last aspects cannot be controlled for in our analyses). As a consequence, the effects of maternal age must be examined taking into account also other cooccurring factors.

Table 2: Some maternal characteristics according to maternal age.

|  | Under 30 | $30-34$ | $35-36$ | 37 or <br> over | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| \% employed at the time of the interview <br> Type of occupations <br> (for employed women) | 46.7 | 63.4 | 63.8 | 64.5 | 56.7 |
| Managerial and professional occupations | 6.2 | 15.0 | 17.2 | 22.5 | 13.7 |
| Blue-collar workers <br> White-collar workers | 31.3 | 17.8 | 15.4 | 12.2 | 21.1 |
| Craftman | 48.6 | 56.6 | 57.2 | 56.1 | 53.8 |
| Education | 13.9 | 10.6 | 10.2 | 9.3 | 11.4 |
| High (university) | 9.3 | 25.2 | 26.5 | 27.7 | 19.2 |
| Middle (high school) | 48.6 | 43.0 | 40.9 | 38.5 | 44.3 |
| Low (junior school or less) <br> Experience of problematic pregnancies <br> \% with pre-term or low birth weight child | 42.1 | 31.8 | 32.6 | 33.8 | 36.5 |
| Family structure | 9.3 | 8.9 | 11.1 | 12.4 | 9.9 |
| Single mothers <br> Mothers cohabiting with a partner | 4.1 | 1.1 | 1.2 | 2.6 | 2.6 |
| Mothers married with a partner <br> Parity | 8.5 | 5.9 | 6.7 | 8.1 | 7.4 |
| First birth | 87.4 | 93.0 | 92.1 | 89.3 | 90.0 |
| Second birth | 69.0 | 44.1 | 30.8 | 25.4 | 49.9 |
| Third or higher order parity | 27.4 | 45.1 | 51.9 | 44.3 | 38.3 |

## 4. Multivariate analyses

### 4.1 The effect of maternal age on ...

As mentioned in Section 2.2, in this section we presented the results of the effect of maternal age on the outcomes of parenting, net of the effects of other covariates (the complete models are reported in the Appendix).

## ... baby's care

Table 3 reports the effect of maternal age on the choice of support for the baby's care.
The upper part of the table shows the effect when employed women are considered. The results suggest that children of older mother are more likely (than women aged 30-34 - reference category) to be cared for by persons not belonging to the family or relative network - baby-sitter or crèche - in comparison than relatives such as grandparents and this is true for all the parities. For example, considering the first births, the odds that older mothers (those who had their first child when they were 37 or over) have their child cared for by a baby-sitter rather than by relatives are about 2.6 times $(2.6=\exp (0.96))$ the odds for mothers who had their first child when they were $30-34$. As analyses (not shown here for space reasons) indicate that the difference between the coefficient of crèche and that of baby-sitter is statistically significant, we may also conclude that the order of "preferences" among employed older mothers is: baby-sitter, crèche, relatives. On the contrary, younger mothers are less likely to involve non-relatives in the care of their children, even if the effect is significant only for second or higher order parity in the baby-sitter/relative contrast.

The lower part of Table 3 considers the behaviour of women who are not employed or who are in maternity leave (at the time of the interview). Results show that older mothers are less likely to involve relatives (such as grandparents) in the care of their children, and this is particularly true for the first child: mothers who had their first child when they were 37 or over have odds of having their children cared for by relatives vs. caring them within their family that are about half $(0.48=$ $\exp (-0.74))$ of those for mothers who had their first child when they were 30-34. In fact, older ages have no significant effects on the contrast non-relatives/parents for all parities, so that the odds of children of older mothers to be cared for their parents equal those to be cared for by non-relatives. Instead, younger mothers are less likely to involve no-relatives figures, such as crèche and babysitter, and more likely to receive help by relatives in the care of their second or higher order parity children, even if these effects are not completely significant (no significant effects are observed for the first child).

Table 3: Coefficients of maternal age influencing the support for the baby's care according to multinomial logistic models.

|  | First birth |  | Second or higher order births |  |
| :--- | :---: | :---: | :---: | :---: |
| EMPLOYED MOTHERS |  |  |  |  |
|  | Crèche/ <br> relatives | Baby-sitter/ <br> relatives | Crèche/ <br> relatives | Baby-sitter/ <br> relatives |
| Maternal age | -0.11 | -0.19 | -0.17 | $-0.42^{* *}$ |
| Under 30 | 0.00 | 0.00 | 0.00 | 0.00 |
| $30-34$ (ref.) | 0.21 | $0.43^{*}$ | -0.07 | 0.09 |
| $35-36$ | $0.31^{* *}$ | $0.96^{* * *}$ | $0.25^{* * *}$ | $0.63^{* * *}$ |
| 37 or over |  |  |  |  |

MOTHERS WHO ARE NOT EMPLOYED OR WHO ARE IN MATERNITY LEAVE

|  | Non-relatives/ <br> parents | Relatives/ <br> parents | Non-relatives/ <br> parents | Relatives/ <br> parents |
| :--- | :---: | :---: | :---: | :---: |
| Maternal age | -0.02 | -0.03 | $-0.43^{*}$ | $0.24^{*}$ |
| Under 30 | 0.00 | 0.00 | 0.00 | 0.00 |
| $30-34$ (ref.) | 0.32 | 0.12 | 0.09 | -0.19 |
| $35-36$ | -0.29 | $-0.74^{* * *}$ | 0.16 | $-0.32^{*}$ |
| 37 or over | * p $<0.10, * *=\mathrm{p}<0.05, * * *=\mathrm{p}<0.01$ |  |  |  |

## ... mother's return to work

Table 4, which shows the effect of the mother's age on her child's age at the return to work after childbirth, suggests that older women do not seem to return significantly later with respect to the others, even when the child is the first one: the signs of the coefficients, at the opposite, reveal that they are more likely to return earlier, but the effects are not significant. More generally, mother's age is irrelevant for the time spent outside the job market after the childbirth. The complete models reported in Appendix (Table B) show that the stronger predictors of the return to work are connected with the characteristics of the job (in particular, the public or private sector and the position - subordinate or self-employed).
... the time spent by the father with the baby
As regards the father's time spent with his child, table 5 shows that partners of older mothers have behaviours that are not different from those of the partners of women aged 30-34 and this is irrespective of the child parity. A specific behaviour is however shown by partners of younger mothers: in the case of first birth they seem to be more involved in spending time with the baby, but this effect is not very strong. More precisely, the expected number of hours they spent with their child in a weekday is $100 *(\exp (0.035)-1)=3.6 \%$ higher than for fathers whose child's mother is 30-34. The complete models reported in Appendix (Table C) show that strong predictors of the time
a father spends with his child on average in a weekday are connected with the type of his job's position.

Table 4: Coefficients of maternal age influencing their children's age at their return to work according to ordered logistic models (later return is modelled).

|  | First birth | Second or higher order <br> births |
| :--- | :---: | :---: |
| Maternal age |  |  |
| Under 30 | 0.01 | 0.09 |
| $30-34$ (ref.) | 0.00 | 0.00 |
| $35-36$ | 0.08 | -0.01 |
| 37 or over | -0.09 | -0.07 |
| $*=\mathrm{p}<0.10, * *=\mathrm{p}<0.05, * * *=\mathrm{p}<0.01$ |  |  |

Table 5: Coefficients of maternal age influencing the father's time spent with his child according to Poisson models (dependent variable: hours a father spends with his child in a weekday).

|  | First birth | Second or higher order <br> births |
| :--- | :---: | :---: |
| Maternal age |  |  |
| Under 30 | $0.035 * * *$ | 0.022 |
| $30-34$ (ref.) | 0.000 | 0.000 |
| $35-36$ | -0.022 | -0.004 |
| 37 or over | -0.001 | -0.003 |
| $*=\mathrm{p}<0.10, * *=\mathrm{p}<0.05, * * *=\mathrm{p}<0.01$ |  |  |

### 4.2 Other results

Considering the complete models reported in the Appendix, we can examine the effects of the parental socio-economic resources on the three domains describing the presence of parents in the daily life of their children. In summary, we can note that higher resources of parents lead to a lower presence in their children's daily life.

As regards the choice of support for the baby's care (Table A1), we can see that working mothers with higher educational level are more likely to receive support by persons not belonging to the family or relative network in comparison than relatives such as grandparents and this is true for all the parities. In line with this result, higher educated women who are not employed or who are in maternity leave (table A2) are more likely to receive help in the care of their children, particularly by non-relative figures.

The effect of maternal education is less strong if we consider the return to work after childbirth (particularly for second or higher order parity), but it is in the direction of an earlier return to work for higher educated mothers (Table B). The role played by the type of occupation is in the same
direction: mothers with higher resources (for example, those with professional and managerial occupations) are more likely to return to work earlier, both for the first and for the second or higher order children. In fact, this may be expression of a constraint and it may not be a preference: higher occupations may mean more responsibilities and, thus, fewer opportunities to stay outside the labour market longer after childbirth (the positive effect of working in the public sector on the probability of returning later to work seems to confirm this hypothesis).

As regards the father's time spent with his child (Table C), again, higher resources mean a lower presence of the parent (in this case, the father) in their children's daily life: higher educated fathers and fathers with higher occupations are less involved in spending time with their baby.

## 5. Conclusions and discussion

The results of our analyses do not support the hypothesis that older mothers may be more present in the daily life of infants than the younger ones and this is documented even in the case of first child. Older mothers who were employed before their pregnancy return to work after childbirth with the same speed of the younger mothers and if they work after childbirth, they are more supported than younger mothers in the child-care by non-relatives, such as baby-sitter and crèche. Only among not employed women, children of older mother are more likely to be cared for by parents than by relatives but: a) this is clearly evident only for the first child; b) the probability to be cared for by the parents equals that of be cared for by non-relatives. Thus, older mothers do not show more traditional behaviours than the younger ones, suggesting that the cohort/age mechanisms hypothesized to explain this oucome might not operate.

Moreover, as our results suggest that older mothers do not present different involvement in the daily life of their child's father, we should conclude that children born from older mother do not experience a stronger presence of their parents (or relatives) in their daily life than those born from youger ones. On the opposite, as younger mothers are more likely to have more involved father (at least in the case of first birth), we may assume that, with respect to the parenting practices, younger men show a less gender specific behaviour.

However, these results have to be read with caution.
With respect to the support for the baby's care, we may interpret the results assuming that older mothers are freer to choose for non traditional childcare; as a consequence they may for example have less dependent relationships with their own parents and prefer them a baby-sitters or a crèches. On the other hand, it is however possible that our estimates are biased because of omitted variables. Children of older mothers probably have older grandparents, who may be dead or may be less able to care the baby (as shown by Del Boca et al. 2005, the "presence of near and healthy grandmother"
has a negative effect on the choice of private childcare). Family network resources in terms of both the presence of grandparents and the relationship between mothers and their parents are not controlled for in our analyses, due to the lack of proper data and this may be at least partially responsible of these results. The higher propension to have children cared by a baby.sitter showed by the older employed mother might support this explanation: it could be the answer of mothers who would prefer traditional care to the constrains due to their limited family network.

With respect to the return to work, we do not consider how many employed women have left definitively their work after the childbearing or whether there is a change from full to part-time job. In addition, as regards employed mothers, the choice of childcare may depends on the compatibility of the available childcare with the mother's working hours, but, again, this information is not controlled for in our analyses due to the lack of proper data.

In general, the study suggests that the strategies through which the parents choose to care their babies may be very complex and an in depth analysis of them need more proper and detailed information on parents' preference and motivations as well as on parents' (environmental) constrains and resources. In addition, data which allows us to distinguish a cohort effect from a lifecourse effect (age effect) would be preferred. Lastly, in this paper we focus on only a subset of potential parenting practices and further aspects of parenting should be worthwhile (we could not examine for example the types of activities in which fathers are involved with their child).

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## APPENDIX

Table A1: Coefficients of maternal age influencing the support for the baby's care according to multinomial logistic models. Employed mothers.


[^0]Table A2: Coefficients of maternal age influencing the support for the baby's care according to multinomial logistic models. Mothers who are not employed or who are in maternity leave at the time of the interview.


[^1]Table B: Coefficients of maternal age influencing their children's age at their return to work according to ordered logistic models (later return is modelled).

|  | First birth | Second or higher order births |
| :---: | :---: | :---: |
| Intercept 5 | -1.98*** | -2.60*** |
| Intercept 4 | -0.95*** | -1.56*** |
| Intercept 3 | 0.01 | -0.56*** |
| Intercept 2 | 1.92*** | 1.32*** |
| Maternal age |  |  |
| Under 30 | 0.01 | 0.09 |
| 30-34 (ref.) | 0.00 | 0.00 |
| 35-36 | 0.08 | -0.01 |
| 37 or over | -0.09 | -0.07 |
| Child's parity (ref: third or higher order) |  |  |
| Second | -- | 0.05 |
| Child's age (ref: 24 months or over) |  |  |
| Under 24 months | 0.01 | -0.01 |
| Child's problems (ref: no) |  |  |
| Low birth weight or pre-term birth | 0.17* | 0.23** |
| Maternal education (ref: junior school or less) |  |  |
| University | -0.27*** | 0.01 |
| High school | -0.14* | -0.03 |
| Maternal job's sector (ref: private) |  |  |
| Public sector | 0.45*** | 0.55*** |
| Maternal job's contract (ref: full-time) |  |  |
| Part-time or with reduced days | 0.31*** | 0.50**** |
| Maternal job's contract (ref: fixed-term) |  |  |
| Open-ended contract | 0.06 | 0.31*** |
| Maternal job's position (ref: white-collar workers) |  |  |
| Managerial occupations | -0.27** | -0.29** |
| Blue-collar workers | 0.09 | 0.37*** |
| Professionals | -1.95*** | -2.13*** |
| Craftsman | -1.41*** | $-1.74 * * *$ |
| Family structure (ref: married mother) |  |  |
| Single-mother | -0.45*** | 0.03 |
| Mother cohabiting with a partner | 0.13 | -0.03 |
| Family economic difficulties (ref: no) |  |  |
| Yes | 0.12 | 0.01 |
| Family income (ref: suffient) |  |  |
| Unsufficient | -0.02 | 0.15 |
| Residence region (ref: South) |  |  |
| North | 0.79*** | 0.76*** |
| Centre | 0.43*** | 0.29*** |

[^2]Table C: Coefficients of maternal age influencing the father's time spent with his child according to Poisson models (dependent variable: hours a father spends with his child in a weekday).

|  | First birth | Second or higher order births |
| :---: | :---: | :---: |
| Scale parameter | 0.808 | 0.866 |
| Intercept | 1.484*** | 1.471*** |
| Maternal age |  |  |
| Under 30 | 0.035*** | 0.022 |
| 30-34 (ref.) | 0.000 | 0.000 |
| 35-36 | -0.022 | -0.004 |
| 37 or over | -0.001 | -0.003 |
| Child's parity (ref: third or higher order) |  |  |
| Second | -- | 0.019 |
| Child's age (ref: 24 months or over) |  |  |
| Under 24 months | -0.031 *** | -0.020* |
| Child's problems (ref: no) |  |  |
| Low birth weight or pre-term birth | 0.003 | 0.025 |
| Father's education (ref: junior school or less) |  |  |
| University | -0.064*** | -0.072*** |
| High school | 0.001 | -0.016 |
| Father's job's position (ref: white-collar workers) |  |  |
| Managerial occupations | -0.128**** | -0.156*** |
| Blue-collar workers | -0.006 | -0.044*** |
| Professionals | -0.127*** | -0.177*** |
| Craftsman | -0.085*** | -0.102*** |
| Father's help in domestic work (ref: no) |  |  |
| Yes | 0.119*** | 0.165*** |
| Mother's employment status (ref: employed) |  |  |
| Not employed or in maternity leave | -0.007 | -0.053*** |
| Family structure (ref: married mother) |  |  |
| Mother cohabiting with a partner | -0.008 | 0.034 |
| Family economic difficulties (ref: no) |  |  |
| Yes | -0.005 | 0.002 |
| Family income (ref: suffient) |  |  |
| Unsufficient | -0.007 | -0.023 |
| Residence region (ref: South) |  |  |
| North | -0.107*** | -0.116*** |
| Centre | -0.044*** | -0.055*** |

[^3]
[^0]:    $*=\mathrm{p}<0.10,{ }^{* *}=\mathrm{p}<0.05, *^{* *}=\mathrm{p}<0.01$

[^1]:    * $=\mathrm{p}<0.10,{ }^{* *}=\mathrm{p}<0.05,{ }^{* * *}=\mathrm{p}<0.01$

[^2]:    * $=\mathrm{p}<0.10,{ }^{* *}=\mathrm{p}<0.05, * * *=\mathrm{p}<0.01$

[^3]:    * $=\mathrm{p}<0.10,{ }^{* *}=\mathrm{p}<0.05,{ }^{* * *}=\mathrm{p}<0.01$

