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Late maternal age and parenting practices

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Keywords: Maternal age, child's care, mother's return to work, fathers' involvement

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1. Introduction

In many developed countries in recent decades, a woman's age at childbirth has been gradually increasing and more women are having children – often their first child – at an older age. In Italy, for example, the percentage of births occurring to women above the age of 35 is rapidly increasing: 18% of births in 1998, 28.4% in 2007, and 32.9% in 2011. Similarly, the percentage of Italian women above 40 who gave birth increased from 2.8% in 1998 to 5.3% in 2007, and reached 6.9% in 2011. A similar picture is emerging across most European countries (Shaw and Giles, 2009).

Late fertility has important consequences on women's lives and those of children. Medical research frequently emphasises the risks of late pregnancies for a baby's health (de La Rochebrochard and Thonneau 2002; Tough et al., 2002; Delbaere et al., 2007); however, late fertility is also associated with some maternal economic and psychological resources (Shelton and Johnson, 2006; McMahan et al., 2011) that can have positive consequences on several aspects of a child's life (Martin, 2004).

It is less clear whether late fertility has consequences on parenting style, that is, behaviours that parents practise daily to raise, care for, and educate their children that may contribute to a child's psychological and physical well-being, as well as to the building of his/her personality. The aim of the present study is to analyse the role of maternal age in some specific aspects of parenting: the type of care and parental presence in the daily life of children during the first two years of life.

Studies on parenting practices in early infancy are relatively numerous (Rowe et al., 2005; Fergusson et al., 2008; Han et al., 2008). The first years after delivery constitute a period of critical adjustment in multiple domains of parenting (Bornstein, 2002). Moreover, for example, the style of childcare during the first years of life may be crucial in children's social, emotional, and cognitive development (Melhuish, 2003; Love et al., 2003; Belsky et al., 2007); however, literature on the association between maternal age and parenting practices is not very rich (Bornstein et al., 2006; Fergusson et al., 2008; Han et al., 2008) and mainly focuses on socio-economic or institutional predictors. A mother's age is usually a control variable, even if age has been proven to significantly influence parenting style (see, for example, Bornstein et al., 2006).

In this study, we explicitly analyse the impact of (late) maternal age on a baby's care by assuming that a mother's age – independent of socio-economic or other contextual factors – expresses a mother's preferences and psychological features. Are babies of older mothers more likely to be cared for by relatives than those born to younger mothers are? Are older mothers more present in the daily life of their children? And what about the father's presence according to the mother's age? We answer these and other questions, distinguishing between employed and not employed mothers. For the former group of women, we consider two domains: support for the baby's care (grandparents, babysitter, or crèche) and the mother's return to work after childbirth; for the latter mothers, we only consider support for the baby's care. We also analyse a further domain for both groups of women: the fathers' time spent with their children. Differently from previous analyses, this study focuses on a set of parenting behaviours, instead of a single one. Thus, even if with a still exploratory approach, it makes an effort to consider parental care as part of strategy.

The analyses refer to Italy, a country that has one of the lowest fertility rates in the world and one of the highest average ages at childbearing (Caltabiano et al., 2009). We retrieved data from the Italian Birth Sample Survey, a national representative survey conducted by the National Statistical Institute (ISTAT) in 2005.

2. Theoretical framework and hypotheses

Literature on the effects of maternal age on parenting practices in early infancy is scarce, even though some researchers underscore the importance of considering maternal age in parenting studies (Bornstein et al., 2006). Age is a focal factor in literature on teenage pregnancies but is only analysed as a simple dichotomisation of teenage versus adult mothers (see, for example, Berlin et al., 2002, Ragozin et al., 1982, and the studies cited by Bornstein and colleagues in 2006). Studies on parenting behaviour in the early infancy period simply consider maternal age at childbirth as a control variable (Fergusson et al., 2008; Han et al., 2008; Rowe et al., 2005). These studies show that maternal age has differentiated influence across the domains of parenting. Moreover, results are often mixed and inconclusive, even in each domain. For example, regarding aspects considered in the current paper, Fergusson and her colleagues (2008) found that levels of grandparents' involvement in childcare decreased with maternal age, but other authors found that younger mothers were also more likely to use sporadic grandparental care versus extended one (Vandell et al., 2003). Similarly, Han and her co-authors (2008) showed that older mothers in the US are less likely to return to work earlier after childbirth; other authors had similar findings for France, but not for Spain (Saurel-Cubizolles et al., 1999; Lapuerta et al., 2011).

From a theoretical standpoint, maternal age may influence childcare in various ways. Basically, a cohort effect can operate through the mother's age. Net of other socio-economic and contextual characteristics, older mothers belong to generations with more traditional maternity models. In particular, older mothers are more likely to have traditional gender ideology (McHale and Huston, 1984), which makes them more likely to conform to parenting models characterised by more marked division of gender roles. As a result, among not employed mothers, older mothers are supposed to be more prone than younger ones are to care directly for their children and less likely to involve other figures. Among employed mothers, those who give birth at an older age are expected to return to work later and to be more likely to have their children cared for by their relatives (i.e. grandparents), whereas younger employed mothers are assumed to be more likely to involve non-relative figures (such as a babysitter or a crèche) in childcare. Finally, independent of a mother's employment status and her gender ideology (Bulanda, 2004), younger mothers' partners may have more egalitarian ideology and may be more present in the daily lives of their children than older mothers' partners are.

Some of these cohort effects may be further strengthened by an age effect. Older parents have greater maturity and greater life experience and are more emotionally prepared for the particular stresses of parenthood (Reece, 1993; Cooney et al., 1993; Neville and Parke, 1997;

McMahon et al., 2011). In particular, older mothers might be abler than younger mothers are to assume the responsibilities and engagements of childrearing, to pay more attention to relational aspects, and to be more strongly motivated to follow their child's growth directly and close-up. Consequently, older unemployed mothers could be more likely to care for their children personally, and older employed mothers to return to work later than younger mothers are. These age effects might be stronger in the case of a first child. However, the age may operate even in opposite direction than the cohort effect. First, the increasing maturity with age could make partners of older mothers more involved in childcare than partners of younger mothers are. Furthermore, as age increases, mothers become progressively more autonomous and able to handle complex situations. In particular, they become less dependent on their or their partner's family of origin. This means older mothers, either employed or unemployed, could be more prone to use formal care (babysitter or crèche) over informal one (grandparents), when they need help with their children's care.

Moreover, the cohort effect can be further weakened by a life course effect (which only refers to employed parents). Neoclassical economic theory (Becker, 1991) shows that, from a rational choice perspective, employed women face higher opportunity costs than not employed mothers do if they use their time to care for their children. Similarly, older employed mothers may have higher opportunity costs. This can be assumed even when controlling for maternal human resources (i.e. job position, level of education). Among employed mothers, those who are older have experienced a longer stay in the labour market¹. Older mothers have invested more in their occupational careers than younger mothers have done and are presumably selected for being less family-oriented and for having stronger labour-market attachment. Thus, a long time spent out of the labour market may produce higher non-material costs among older employed mothers than among younger employed mothers. This effect, which may be stronger in the case of a first child, may make older employed mothers more prone to return to work earlier. The same perspective could extend to the older mothers' partners: because of their investment in occupational careers, partners of older mothers might be less involved in childcare compared to partners of younger employed mothers. What about childcare when mothers return to work? It is difficult to say whether the "opportunity cost" hypothesis could even explain preferences in this field. However, since older employed mothers are more likely to prefer childcare that allows better conciliation with their work time, we may assume that their preferences are independent of the type of care (grandparents, babysitter, or crèche),

Thus, the impact of mother's age on parenting behaviour is the result of several mechanisms, not all with converging effects. In particular, the positive association between mother's age and more traditional childcare suggested by the cohort effect may be as much weaker (disappear or even becomes negative) as age or life course effects are stronger.

3. The Italian institutional context

Italian welfare is not very generous with respect to parents. The practically non-existent children's allowance, the few public services for childcare, and the few possibilities of combining paid work and childcare contribute to Italy having one of the lowest fertility rates in Europe (Caltabiano et al., 2009).

The early infancy period (the first three years of a child's life) is particularly difficult to manage if a mother is employed. Despite a relatively generous legislation in terms of duration of base maternity leave, there are a lot of differences according to the type of work. Italian legislation allows for a period of compulsory maternity leave that lasts 5 months: 2 months before and 3 months after the birth (in fact, *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

¹ In Italy, due to an inflexible labour market that does not provide frequent exits and entries, employed women are usually continuously employed and in full-time jobs.

companies, 100 per cent of the woman's 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 30 per cent of earnings (*Law 151/2001*). Again, women working in the public sector or in large companies have better conditions; they are usually paid 100% of their 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 that can last up to 3 months (and which can be taken until the child's 1st birthday) with a remuneration of 30% of their usual earnings. Workers with fixed term contract are entitled to only the compulsory leave, with a remuneration of 80% of their salary, but not any of the optional leaves. Compulsory parental leaves for fathers did not exist at the time of this study.

Other helps to combine paid work and motherhood are scarce. Given the highly regulated characteristics of the Italian labour market, part-time job opportunities are very limited.

Besides these aspects, Italian mothers receive minimal childcare support during early infancy. The availability of childcare does not seem to satisfy demand (Del Boca et al., 2005). Public childcare (the most common type of formal childcare in Italy, Del Boca et al., 2005) has, on average, high quality standards (De Henau et al., 2006) but limited availability, high costs for unsubsidised families, and inflexible hours. Private childcare is not any more widespread. In addition, there are marked differences across regions: the percentage of children under three enrolled in public childcare is over 20% in some Northern areas but under 5% in many Southern regions (Istat, 2011). Moreover, traditional gender roles still predominantly shape Italian fathers' behaviours (Romano and Bruzzese, 2007; Smith Koslowski, 2008). The experience of parenthood seems to imply a specialisation of gender roles, with mothers spending more time performing housework and childcare and fathers emphasising their breadwinner roles (Anxo et al., 2007).

As a result, Italy still faces high exit rates of new mothers from employment (Pronzato, 2009) and one of the lowest levels of female labour market participation among OECD countries (Jaumotte, 2003). Alternatively, mothers continue to work in full-time jobs, with their babies extensively cared for by informal care, particularly by grandparents (Del Boca et al., 2005).

4. Data, measures and models

4.1. The sample

We use data from the *Italian Birth Sample Survey*, which was carried out in Italy in 2005 by the National Statistical Institute (ISTAT). This survey interviewed almost 16,000 mothers about 21-26 months after their childbirth and provides information on the socio-demographic characteristics of the newborn and his/her parents, and on the economic status of the family. In particular, the 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. Since the questionnaire asks each of these three parenting behaviour to appropriate groups of respondents, our analyses necessarily consider three different samples (according to the available information): the 15,868 women of the whole sample (for the analyses on support for baby's care), the 8,354 women who were employed at the time of the pregnancy and had not left their job at the time of the interview (the mother's return to work after childbirth), and the 14,793 married or cohabiting women whose partners are employed and are the biological fathers of the child (the father's time spent with the child) households.

4.2. Measuring the outcomes

The 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 time of interview. Employed mothers are asked who principally cares for their child when they are at work. Not employed mothers and those who were on maternity leave 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, the identity of this non-maternal figure is investigated. Therefore, 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 babysitter, and those who care for their children with the help of their partner and/or other relatives (in particular, parents and parents-in-law). For women who are not employed (6,869 observations) or who were on maternity leave (745 observations) at the time of the interview (thus, for 7,614 observations), a different categorization is used: children who are not usually cared for 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 babysitter or a crèche.

The Mother's Return to Work after Childbirth. Since in our sample the percentage of mothers who started working only after childbearing is very modest (3.99%), we considered the employment decisions after childbirth of the 64% of mothers (10,218 observations) of the sample who were employed before pregnancy. For these women, there are several ways to show their propensity to spend more or less time with their child instead of at work: they can leave their job after the child's birth, they can return to work later after compulsory maternity leave, or they can return to work and opt for part-time work. We decided to analyse the maternal choice to spend more or less time with the child by focusing on the age of children at their mother's return to work after childbirth. Indeed, 18.1% of women who were employed before pregnancy withdrew from work after childbirth, but only for 9.9% their withdrawal was related to their newborn or to problems connected with conciliation of career and family. This percentage decreases among older mothers. Moreover, only a small percentage of those who were in full-time work before pregnancy moved into part-time work after the child's birth (18.1%). This low value is probably constrained by the fact that part-time employment is quite rare in Italy (Buddelmeyer et al. 2005). The sample considered for this analysis is thus represented by mothers who were employed before pregnancy and who were employed or on maternity leave at the time of interview (they total 8,354). The mothers reported their child's age at their return to work using the following 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 suitable in the present analyses considering the Italian legislation on maternal leave.

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 the child's mothers (thus 413 single-mothers are excluded). Moreover, fathers who are considered for this question are those employed at the interview² (504 not employed fathers are excluded). In this way, 14,793 observations for this parenting domain were made. 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 descriptive analyses (see Table 1), we consider a categorical variable grouping fathers according to how much time they spend with their children: 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).

4.3. Modeling the effect of the mother's age on baby's cares

To isolate the effects of maternal age *per se*, multivariate analyses have been used. Specific multivariate models were run depending on the type of outcome.

a) The Covariates

² In fact, they may be also in paternity leave, but in Italy this regards very limited cases (Istat, 2006).

The Mother's Age at the Birth of Child. 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 over³. Particular attention has been paid to the older age group. This variable is the focus of our study and the other covariates we mentioned in the following are used as controls.

Child's Parity. Another important covariate is baby's parity. Since we assumed that the effect of the mother's age may change according to whether the child is the first-born or not, we tested this interaction effect estimating different models for the first birth and for the second or higher order births. Moreover, parity (2, 3 or more) has been used as a covariate in the models for second or higher order births, since we know that higher order births are more common among older mothers (see Table 2) and assume that child's care may depend on the child's parity.

Background Covariates. Several socio-economic and demographic variables were evaluated as potentially disturbing factors.

A set of covariates is common to all models. They refer to some baby's characteristics (age, birth weight and prematurity), the region of residence (it controls for differences in the public services for children, as well as for cultural differences that may influence the parental strategies), and some family resources (structure and economic condition). Unfortunately, we cannot control for the parent's relative network (particularly for presence and availability of mother's parents and parents-in-law) due to the lack of proper data in the questionnaire. This will have to be considered when the results will be commented⁴.

Other covariates are specific of the different outcomes. Analyses examining the support for the baby's care and the mother's return to work after childbirth control for maternal socio-economic conditions such as education and employment status, and job's characteristics (for employed mothers). A focus restricted only to maternal characteristics is motivated by the fact that maternal and paternal characteristics are often strongly positively related within families, and thus using both parents' covariates could confound the interpretation. In addition, a focus only on maternal characteristics allowed us to consider in our analyses also mothers with children who have no resident fathers. Apart from maternal employment status, the father's economic condition (education and job's characteristics) was instead controlled for in the analysis of father's behaviour.

b) The models

The Support for the Baby's Care. The support for the baby's care is analysed through multinomial logistic regression models (Agresti, 2002). 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. As we must differentiate the child's care according to the mother's employment status, we estimated two different multinomial logistic models. For mothers employed at the time of the interview, the reference category is women whose children are cared for by parents and grandparents (or other relatives); for women who were not employed or who were on maternity leave, the reference category is defined by mothers whose children are cared for only by their parents.

³ The choice of this categorization is partially imposed by the data which are collected using a categorization with eight modalities (under 24, 25-27, 28-29, 30-31, 32-34, 35-36, 37-39, 40 or over).

⁴ This may be a source of bias for our results since the age of mothers is connected with that of their parents and parents-in law: thus, children of older mothers probably have older grandparents, who may be dead or may be less able to care the baby. For example, among women cohabiting with a partner interviewed during the Italian survey "Family and Social Subjects" (2003), the mean number of parents and parents-in-law still living at the time of the interview is 3.57 for women aged under 32 at the interview (corresponding, on average, to the younger mothers - aged less than 30 at the birth of the child, of the sample considered in the present study) and this number decreases with the age of women till 2.71 for older women aged 39-44 (corresponding to mothers aged 37 or over at the time of the birth of their child).

The Mother's Return to Work after Childbirth. 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 Father's Time Spent with his Child. 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.

5. Descriptive analyses

Table 1 shows the parenting practices with respect to the domains that are considered in this study: child's care, return to work of employed mothers, and time spent by the father with the child. In early infancy, Italian babies are mainly cared for by informal care. Almost two-thirds of the children of employed women are cared for by grandparents (or other relatives); if we add those cared for by babysitters, the percentage of children cared for at home exceeds 70%. This is further stressed among the mothers who are not employed or on maternity leave: here quite the totality of babies is personally cared for by the mothers (86%) or by relatives (10%). The age of the child when employed mothers return to work, as well as the time spent by the fathers with their children, is very differentiated. Most mothers (27%) return to work when the child is 3-6 months old, but almost one out of five return work when the child is more than one; one out ten mothers return when the child is three or less months. Similarly, one fifth of the fathers stay with the baby, on average, no more than two hours in a weekday. One third of fathers spend at least five hours in a day with their child.

Maternal age at the time of delivery seems to be weakly associated with some of these behaviours. In regard to the children's age when the mother returns to work, the descriptive results do not show specific patterns across the mother's ages; however, the results show that mothers who return to work very late are mainly the youngest ones and those who return to work earlier are mainly the oldest ones. Fathers' behaviours are a little more differentiated by the mother's age, even if a specific trend by age is not clear. In general, children of the oldest mothers are also those whose fathers spend less time with them and, on the contrary, children of youngest mothers have fathers who spend far more time with them. The child's care is more differentiated by age. Older working mothers are less likely to involve grandparents or other relatives in the care of their children and are more likely to use a babysitter and a crèche than younger mothers. Given the low variability of behaviours, the relationship between a mother's age and the type of support for baby's care is less clear among not employed (or in maternity leave) women. In general, in this group, older mothers are less likely to turn to relatives for the baby's care than younger ones, and more likely to care for the child personally.

Table 1: Parenting practices according to maternal age.

	<i>Under 30</i>	<i>30-34</i>	<i>35-36</i>	<i>37 or over</i>	<i>Total</i>
<i>Support for the baby' care:</i>					
<i>- Employed mothers</i>					
Crèche	24.0	27.8	28.9	32.3	27.5
Babysitter	3.9	7.8	10.5	17.0	8.6
Grandparents or other relatives	72.1	64.4	60.6	50.7	63.9
Total = 100	2,801	2,890	971	1,592	8,254
<i>- Not employed or in maternity leave mothers</i>					
Parents	85.9	84.0	85.0	88.1	85.6
Grandparents or other relatives	10.5	10.8	9.3	6.7	9.9
Crèche	3.3	4.4	4.5	3.7	3.8
Babysitter	0.3	0.8	1.2	1.5	0.7
Total = 100	3,782	2,088	687	1,057	7,614
<i>Child's months at the mother's return to work</i>					
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
<i>Father's time spent with his child</i>					
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	36.0	30.0	29.1	30.5	32.3
Total = 100	5,959	4,784	2,510	1,240	14,793

However, these descriptive results should be considered with caution since demographic and socio-economic factors may confound the associations between maternal age and parenting practices. As Table 2 shows, older mothers are more likely to have both children of higher parity and more problematic pregnancies than younger mothers. Moreover, older mothers are more likely to be employed, to have higher occupations, higher education, and higher economic resources. Table 2 also shows that, as assumed, family structure changes with maternal age: the youngest and oldest mothers are more likely to live in non-traditional families, such as single-mothers and cohabiting with their partner; whereas, mothers aged 30-36 are more likely to be married. These structural differences may influence childcare because they mean more or less family resources for care the baby. On the other hand, younger mothers have presumably more family childcare resources due to the presence of younger grandparents, and, oppositely, less help from siblings, given the decreasing fertility through the birth-cohorts (unfortunately, these last aspects cannot be controlled for in our analyses).

Table 2: Some maternal characteristics according to the mother's age at the child's birth.

	<i>Under 30</i>	<i>30-34</i>	<i>35-36</i>	<i>37 or over</i>	<i>Total</i>
<i>% employed at the time of the interview</i>	46.7	63.4	63.8	64.5	56.7
<i>Type of occupations (for employed women)</i>					
Managerial and professional occupations	6.2	15.0	17.2	22.5	13.7
Blue-collar workers	31.3	17.8	15.4	12.2	21.1
White-collar workers	48.6	56.6	57.2	56.1	53.8
Craft and trades workers	13.9	10.6	10.2	9.3	11.4
<i>Education</i>					
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)	42.1	31.8	32.6	33.8	36.5
<i>Family structure</i>					
Single mothers	4.1	1.1	1.2	2.6	2.6
Mothers cohabiting with a partner	8.5	5.9	6.7	8.1	7.4
Mothers married with a partner	87.4	93.0	92.1	89.3	90.0
<i>Experience of problematic pregnancies</i>					
% with pre-term or low birth weight child	9.3	8.9	11.1	12.4	9.9
<i>Parity</i>					
First birth	69.0	44.1	30.8	25.4	49.9
Second birth	27.4	45.1	51.9	44.3	38.3
Third or higher order parity	3.6	10.8	17.3	30.3	11.8

6. Multivariate analyses

6.1. The effect of maternal age on...

... the Support for the Baby's Care.

Tables 3 and 4 refer to the choice of support for the baby's care, respectively, for employed women and for those who are not employed or who are on maternity leave at the time of the interview. As regards employed women, Table 3 shows that children of older mother are more likely (the reference category is that of women aged 30-34) to be cared for by persons not belonging to the family or relative network - babysitter or crèche - in comparison to relatives such as grandparents. This happens irrespective of the parity. For the babysitter, the propensity to prefer this type of care to relatives increases with the age of the mother. The odds of mothers aged 37 or over at the birth of their first child having a child cared for by a babysitter rather than by relatives are about 2.6 times ($2.6 = \exp(0.96)$) higher than the odds for the mothers aged less than 35; similarly, the odds of the oldest mothers at their second or higher order child having their baby cared for by a babysitter (vs. relatives) are 88% ($100 * 1.88 = 100 * \exp(0.63)$) higher than that of mothers aged 30-36, and 2.8 times ($2.8 = \exp(0.96+0.42)$) the odds for the mothers aged 30 or less. In the case of crèche, the effect of the age is limited to the highest age group and more modest: mothers who had their first child at the age of 37 or over have a likelihood to have their child cared for by the crèche rather than relatives that is 36% higher than that of mothers who had their first child at younger ages (for the second or higher parities, the corresponding odds is 28%). Other analyses (not shown here for space reasons) indicate that the difference between the coefficient of crèche and that of babysitter is statistically significant; thus, we may also conclude that the order of "preferences" among older mothers is: babysitter, crèche, relatives.

Table 3: The support for the baby's care according to child's parity. Multinomial logistic models. Employed mothers.

	<i>First birth</i>		<i>Second or higher order births</i>	
	<i>Crèche/ relatives</i>	<i>Babysitter/ relatives</i>	<i>Crèche/ relatives</i>	<i>Babysitter/ relatives</i>
<i>Intercept</i>	-1.21***	-3.02***	-1.62***	-2.57***
<i>Maternal age</i>				
Under 30	-0.11	-0.19	-0.17	-0.42**
30-34 (ref.)	0.00	0.00	0.00	0.00
35-36	0.21	0.43*	-0.07	0.09
37 or over	0.31**	0.96***	0.25***	0.63***
<i>Child's parity (ref: third or higher order)</i>				
Second	--	--	0.10	-0.47***
<i>Child's age (ref: 24 months or over)</i>				
Under 24 months	-0.32***	-0.05	-0.25***	0.09
<i>Child's problems (ref: no)</i>				
Low birth weight or pre-term birth	-0.03	-0.04	0.01	-0.06
<i>Maternal education (ref: junior school or less)</i>				
University	0.61***	1.08***	0.81***	0.98***
High school	0.29***	0.09	0.39***	0.45***
<i>Maternal job's sector (ref: private)</i>				
Public sector	0.04	0.11	0.05	0.13
<i>Maternal job's contract (ref: full-time) reduced</i>				
Part-time or with reduced days	-0.23***	-0.08	-0.17**	-0.22*
<i>Maternal job's contract (ref: fixed-term)</i>				
Open-ended contract	0.16*	0.04	0.21**	0.42**
<i>Maternal job's position (ref: white-collar workers)</i>				
Managerial occupations	-0.07	0.19	0.21	0.76***
Blue-collar workers	-0.28***	-0.47*	-0.29**	-0.62***
Professionals	0.10	0.29	0.11	0.55***
Self-employed workers	-0.32**	-0.45	-0.28**	0.26
<i>Employment status before pregnancy (ref: not employed)</i>				
Employed	-0.02	0.33	0.10	0.41
<i>Family structure (ref: married mother)</i>				
Single-mother	0.49***	0.23	0.36	0.19
Mother cohabiting with a partner	0.19*	-0.46*	0.63***	0.11
<i>Family economic difficulties (ref: no)</i>				
Yes	0.39***	-0.25	0.34***	-0.02
<i>Family income (ref: sufficient)</i>				
Uninsufficient	0.16	0.32	0.46***	0.14
<i>Residence region (ref: South)</i>				
North	0.12	-0.25	0.22**	-0.37***
Centre	0.11	-0.06	0.37***	-0.40***

* = $p < 0.10$, ** = $p < 0.05$, *** = $p < 0.01$

Table 4 refers to the behaviour of women who are not employed or who are on maternity leave at the time of the interview. The results show that a mother's age has no significant effects on the contrast non-relatives/parents (in fact, youngest mothers at their second or higher order birth seem to be less prone to involve no-relatives figures, such as crèche and babysitter, but this effect is

statistically weakly significant). On the contrary, the maternal age has a significant effect on the propensity to involve relatives (such as grandparents), in comparison than parent themselves. This effect is common to all parities but is particularly relevant for the first born: the oldest mothers are less likely to involve relatives in comparison than the parent themselves 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 older have odds of having their children cared for by relatives versus caring them within their family that are about half ($0.48 = \exp(-0.74)$) of those for mothers who had their first child at younger ages.

Table 4: The support for the baby's care according to child's parity. Multinomial logistic models. Mothers who are not employed or who are in maternity leave at the time of the interview.

	<i>First birth</i>		<i>Second or higher order births</i>	
	<i>Non-relatives/ Parents</i>	<i>Relatives/ parents</i>	<i>Non-relatives/ Parents</i>	<i>Relatives/ parents</i>
<i>Intercept</i>	-4.28***	-2.53***	-4.19***	-2.66***
<i>Maternal age</i>				
Under 30	-0.02	-0.03	-0.43*	0.24*
30-34 (ref.)	0.00	0.00	0.00	0.00
35-36	0.32	0.12	0.09	-0.19
37 or over	-0.29	-0.74***	0.16	-0.32*
<i>Child's parity</i> (ref: third or higher order)				
Second	--	--	0.16	-0.14
<i>Child's age</i> (ref: 24 months or over)				
Under 24 months	-0.17	0.14	-0.05	-0.26**
<i>Child's problems</i> (ref: no)				
Low birth weight or pre-term birth	0.24	-0.21	0.25	0.17
<i>Maternal education</i> (ref: junior school or less)				
University	1.74***	0.78***	1.55***	0.17
High school	0.97***	0.38***	0.83***	0.19
<i>Employment status before and after pregnancy</i> (ref: not employed both before and after)				
In maternity leave at the interview	2.08***	1.56***	1.71***	1.60***
Withdrawal from work after delivery	0.77***	-0.02	0.84***	0.39**
<i>Family structure</i> (ref: married mother)				
Single-mother	0.93**	1.21***	0.87	0.28
Mother cohabiting with a partner	0.39	0.05	0.34	-0.48
<i>Family economic difficulties</i> (ref: no)				
Yes	0.25	-0.20	-0.04	0.03
<i>Family income</i> (ref: sufficient)				
Uninsufficient	0.28	-0.09	-0.09	-0.21
<i>Residence region</i> (ref: South)				
North	-0.16	0.06	-0.09	0.29**
Centre	-0.20	0.19	0.05	0.48***

* = $p < 0.10$, ** = $p < 0.05$, *** = $p < 0.01$

...the Mother's Return to Work after Childbirth.

Table 5, which focuses on children's age at the return of their mothers 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 their first one (on the contrary, the signs of the coefficients seem to suggest a weak propensity of older mothers to return earlier to work than younger ones, but the effects are not statistically significant and the differences are very small). Generally, the mother's age is irrelevant for the time spent outside the labour market after the childbirth.

Table 5: Children's age at their mothers' return to work according child' parity. Ordered logistic models (later return is modelled).

	<i>First birth</i>	<i>Second or higher order births</i>
<i>Intercept 5</i>	-1.97***	-2.60***
<i>Intercept 4</i>	-0.94***	-1.56***
<i>Intercept 3</i>	0.02	-0.57***
<i>Intercept 2</i>	1.92***	1.32***
<i>Maternal age</i>		
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
<i>Child's parity</i> (ref: third or higher order)		
Second	--	0.05
<i>Child's problems</i> (ref: no)		
Low birth weight or pre-term birth	0.17*	0.23**
<i>Maternal education</i> (ref: junior school or less)		
University	-0.27***	0.01
High school	-0.14*	-0.03
<i>Maternal job's sector</i> (ref: private)		
Public sector	0.45***	0.55***
<i>Maternal job's contract</i> (ref: full-time)		
Part-time or with reduced days	0.31***	0.50***
<i>Maternal job's contract</i> (ref: fixed-term)		
Open-ended contract	0.06	0.31***
<i>Maternal job's position</i> (ref: white-collar workers)		
Managerial occupations	-0.27**	-0.29**
Blue-collar workers	0.09	0.37***
Professionals	-1.95***	-2.13***
Self-employed workers	-1.41***	-1.74***
<i>Family structure</i> (ref: married mother)		
Single-mother	-0.45***	0.03
Mother cohabiting with a partner	0.13	-0.03
<i>Family economic difficulties</i> (ref: no)		
Yes	0.12	0.01
<i>Family income</i> (ref: sufficient)		
Insufficient	-0.02	0.15
<i>Residence region</i> (ref: South)		
North	0.79***	0.76***
Centre	0.42***	0.29***

* = $p < 0.10$, ** = $p < 0.05$, *** = $p < 0.01$

... *the Father's Time Spent with his Child.*

In regard to the father's time spent with his child (Table 6), 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 parity⁵. However, a specific behaviour is shown by partners of the youngest mothers at their first child: they seem to be more involved in spending time with the baby. This effect is not very strong, even if highly significant from a statistical viewpoint. 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 that of fathers whose child's mother is 30-34 or older.

Table 6: The father's time spent with his child according to child's parity. Poisson models (dependent variable: hours a father spends with his child in a weekday).

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

* = $p < 0.10$, ** = $p < 0.05$, *** = $p < 0.01$

Thus, children born from older mothers do not experience a stronger presence of their parents in their daily life. Conversely, our results support the hypothesis that new and less

⁵ Preliminary analyses have shown that partners of employed mothers do not show significant differences from those of not employed ones and, thus, a unique model considered partners of both employed and not employed mothers is here presented.

traditional models of fatherhood--even if with difficulties--move through cultural changes across the cohorts of new father who adopt less gender-specific behaviours.

6.2. Background covariates

Among the numerous covariates with significant effects on the parenting practices, those more predictive of the type of childcare and of the physical presence of parents in the daily life of their children are surely the educational level of the parents and their employment characteristics. Broadly speaking, our analyses show that higher human capital of parents (in terms of education and employment skills) leads to a lower presence of parents and relatives in children's daily life.

Mothers in professional and managerial occupations, as well as self-employed workers⁶, return to work earlier than those in other occupations (Table 5). As suggested by literature (Kuhlenkasper and Kauermann, 2010), mothers in higher job positions may have several reasons to return to work early: they may desire to return to an interesting job, but they may be also forced to return early as higher positions are positively associated with higher responsibilities. Self-employed workers may have partially the same reasons of managers and professionals, but in Italy their maternity leave is also little protected by the law (on the contrary, women employed in the public sector--that enjoy more favourable contractual conditions--are more likely to return to work later than those in the private sector). In addition, given the higher flexibility of their job, professionals and self-employed workers are more able to combine work and family, and this may promote an early return to work.

When employed mothers have returned to work, the job position shows differences for the childcare (Table 3): the blue-collars (and self-employed workers) are more likely to use informal childcare; managers and professionals--at least for those at second or higher parities--are more likely to receive aid by formal care (babysitter in particular)⁷. The reasons explaining the behaviour of blue-collars may be financial; the reasons of self-employed workers may be a mix of financial and opportunities (they may better combine their presence with that of grandparents). The reasons of managers and professionals are more difficult to interpret but the desire for autonomy from families of origin (and maybe not to burden on relatives) and direct control of the baby care may be at the origin of this choice.

Interestingly, contacts with the labour market also influence the behaviours of not working mothers (Table 4). Those who are in maternity leave, as well those who left their work after childbirth, are more likely to use formal care than not working mothers. It could be that the working experience selects women for different lifestyles and/or different preferences that influence parenting strategies.

In line with literature, net of income and working position, high education is strongly associated with less traditional parenting behaviours (Fergusson et al., 2008; Kuhlenkasper and Kauermann, 2010). More educated employed women return to work earlier than less educated ones, at least in the case of the first child (Table 5). Moreover, when working, they are more prone to use formal care independently of the parity (Table 3). Similarly, more educated not working women are more prone to use formal and informal care with respect to care personally their child, whatever the parity (Table 4). It is possible that a higher level of education expresses effects not completely controlled of the covariates relative to income and work position: high education means also more responsibility for working mothers and more income for both working and not working mothers. In addition, more educated women may be farther from their parents or parent-in-law and this might imply less opportunity to receive aid from grandparents. However, this result may be also an effect of different lifestyles and values that have consequences on parenting practices.

⁶ Here and in what follows, this expression will denote a specific group of self-employed individuals that is: craft workers, artisans, and shopkeepers.

⁷ Interestingly, women with part-time work at the interview are also those who return later to work and use less than others formal care: this suggests that parental practices might depend on life strategies defined by individual attitudes towards family and work. In other words, people's behaviours, which produce more or less traditional parenting models, might depend coherently on their more or less work/family-oriented attitudes.

Finally, in regard to the time the father's time spent with his child (Table 6), employment characteristics and level of education influences the time spent by the fathers with their children. Fathers with higher working statuses, as well as artisans, are less present in their children's daily life than white or blue-collar workers. Fathers with the highest level of education are also less present in the daily life of their children.

7. Conclusions and discussion

This study analyses the effect of a mother's age at childbirth on parenting practices for babies in Italy aged 21–26 months, assuming that it expresses mother's preferences and psychological features.

Net of class (and other family) differences, the results show that a mother's age at the time of delivery has a role in determining who provides daily care for her child during the first years of her/his life, depending on her employment status. Fathers do not have, instead, clearly differentiated behaviours according to the mothers' age; however, the weak greater presence of younger mothers' partners give some empirical evidence to the hypothesis of a cohort effect, that is a more traditional gender behaviour among older fathers.

Among not employed mothers, older parents are more likely to care for their children personally, but only if the alternative is to be cared for by relatives. This behaviour is at least partially consistent with the hypothesis of cohort preferences, which makes older mothers more prone to adopt more traditional parenting models. Since this behaviour is more evident for a first child, the "age effect" could also make older mothers more likely to be attentive to their children.

Among employed mothers, older ones employ parenting strategies that, on the whole, are less traditional than those of younger mothers. Older employed mothers do not conclude their maternity leaves later than the other mothers; in addition, when older employed mothers return to work, they are more likely than younger ones are to employ non-relatives, such as a babysitter (mainly) or crèche to care for their children. Thus, children of older employed mothers are less likely to stay with family or kin. The lack of significant difference between younger and older mothers in the return to work could be explained by older mothers' coexistent opposite "cohort/age" and "life course" preferences. Two explanations are possible for why older employed mothers are more prone than younger employed mothers are to use formal childcare. On the one hand, this result may depend on the mother's network of relatives – especially the grandparents' availability. Children of older mothers probably have older grandparents who may be deceased or less able to care for a baby (as Del Boca et al. [2005] explain, the "presence of near and healthy grandmother" has a negative effect on the choice of private childcare). Even if grandparents are living and healthy, they may not have enough energy to care for a baby continuously and for the hours working mothers need. Instead, older grandparents may be available for occasional childcare when the mother is either not employed or employed part-time. Moreover, parents and parents-in-law may help older employed mothers less because they are conscious of the mothers' autonomy and life experience, compared to younger mothers. Thus, the results underestimate older employed mothers' propensity to adopt more traditional parenting behaviours: older employed mothers' higher propensity towards formal childcare might simply reflect fewer options. Their higher propensity to employ a babysitter might support this explanation as a babysitter allows the baby to stay at home and permits the mother closer control of care, something more akin to the traditional care unavailable due to family network constraints. On the other hand, we might assume that older employed mothers are more prone to prefer formal childcare because they may be less dependent on their families of origin ("age" effect). Available data does not explain whether this behaviour results from preferences or constraints. Our opinion is that older employed mothers' higher propensity towards formal childcare is not solely a result of inadequate control of family resources. Older employed mothers behave similarly to more educated mothers whose behaviour should not be

influenced by family constraints. Thus, it is possible that more independent or mature women are more prone to choose non-traditional childcare.

Though not the focus of this study, we found that even other parental characteristics influence parenting practices. Mothers of higher social status adopt less traditional behaviours than those of lower social status: children of more educated mothers/fathers are less likely than children of parents with lower education are to be cared for by their parents or grandparents. Similarly, the more involved and responsible mothers/fathers are in their jobs, the less likely they will be involved in childcare (mothers return to work earlier and fathers spend less time with their children), opting for formal childcare (mainly a babysitter) instead.

The present study improves on previous research in two points. First, in an effort to consider parental care as part of strategy, it considers a set of parenting behaviours instead of a single parenting one. Second, this study tries to interpret the effect of age within a theoretical framework, assuming that childcare practices result from complex decision processes that weigh constraints and convenience against preferences.

However, the study has some limitations. First, the contextual constraints/resources are not completely controlled. Besides the network of relatives, we cannot control the institutional context. In particular, availability of childcare services is only partially taken into account, and the situation is very heterogeneous in Italy: the residence area is considered but more detailed controls are lacking. Second, this study analyses behaviours that are part of parenting strategy. Only three domains are considered here – support for childcare, the mother's return to work after childbirth, and the father's time spent with his child – but parenting involves much more than these aspects, including the choice of part-time work or withdrawal from work after childbirth. As above mentioned, part-time opportunities in Italy are scarce. Regarding withdrawal from work, preliminary analyses show withdrawal is more common among younger mothers, but it was to a great extent a constraint rather than a choice. In addition, choices in different domains are connected. For example, more involved fathers allow mothers to have their children cared for by grandparents or babysitters in a more flexible way. These issues require a systemic approach not used in this paper. Third, the current study does not consider quality of care. Clearly, both the presence of the mother/father and the time quality are important in the first years of childhood, and the same holds for formal services (see, for example, Love et al., 2003). As above mentioned, public childcare services in Italy have high quality on average, so we can assume that at least some formal care is competitive with informal care. At this stage of the study, however, we can only stress what kind of care is used by older mothers. Other analyses will need to verify the relationship between type of childcare and a child's well-being.

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