

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. We refer to the early infancy period and consider three domains of parenting: a) support for the baby's care (grandparents, babysitter, or nursery), b) the mothers' return to work after childbirth, and c) the father's time spent with his child. Results do not support our 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, fathers, return to work, fertility and family

1 Introduction

Recent decades have 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 Europe (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

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respect to the younger ones. Most of these differences may depend on 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 a sense of maturity, as 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 the literature on the association between maternal age and parenting practices is not very rich (Bornstein et al., 2006).

The present study explores the effects of maternal age (in particular, of late maternal age) on three domains of parenting practices, namely: a) support for the baby's care (grandparents, babysitter, or nursery), 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).

The underlying hypothesis is that older mothers may be more 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 nursery or other non-relatives, such a baby-sitter, in the care of their children. On the other hand, from an age perspective, older mothers may prefer to personally look after their children. 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 attenuated in the case of working mothers who have their first child at older ages. These could be, indeed, presumably selected as less family oriented.

Fathers' behaviours are less certain. From a cohort perspective (which means stronger gender differences for older cohorts), older mothers are expected to have less involved partners, regardless of the parity. On the opposite side, from an age perspective, older fathers may be expected to be more present than the younger ones, particularly in the case of the first child.

2 Data and methods

2.1 Data and measures

We use data from the *Italian Birth Sample Survey*, conducted 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. Unfortunately, information on the family network and on the childcare services available in the area of residence is not available.

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. In this way, two different categorical variables are used. From one hand, employed women (8,254 observations) are distinguished in three categories: those whose children are principally cared for by a nursery, 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). From the other hand, for women who are not employed or who are in maternity leave at the time of the interview (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 nursery.

The mother's return to work after childbirth

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 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.

The father's time spent with his child

The father's time spent with his child is collected only for fathers cohabiting with their children and who are employed at the interview (14,793 observations) and is measured by the hours a father spends with his child in a day: in our preliminary analyses (see Table 1) we consider a categorical variable grouping fathers who spend two hours or less with their children in a day, from 3 to 4 hours a day, and spending 5 hours or more.

2.2 Methods

To isolate the effect of maternal age *per se*, several socio-economic and demographic variables were evaluated as potential covariates. Maternal socio-economic conditions, such as her education and employment status, and her job's characteristics were controlled for. In addition, some baby's characteristics (gender, age, birth weight and prematurity) were considered. Lastly, family structure and economic condition, and the residence region were used as potential covariates. In the analysis of father's involvement, his education and job's characteristics were also controlled for.

As regards baby's parity, first it is considered as a covariate, since first births are more common among younger mothers: they are 69% among women under 30, 44% among 30-34, and they decrease to 25% among women aged 37 or over (conversely, higher order births are more common among older mothers). Then, 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 are estimated.

The support for the baby's care is analysed through multinomial logistic regression models. 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.

The children's age at their mothers' return to work is considered through an ordered logit model, whose coefficients describe the probability of returning later.

Lastly, the hours a father spends with his child in a day are modelled by a Poisson model.

3 Results

3.1 *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 nursery than younger mothers. The situation is 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: thus, the choice of grandparents as their children's support is again less common among older mothers.

As regards the children's age at the return to work, we note that older mothers are weakly more prone to return earlier than younger ones.

Lastly, considering the hours spent by fathers with their children in a day, children of younger mothers presented higher involvement of their fathers.

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). In addition, they presumably have less family childcare resources due to the presence of older grandparents, but, in the opposite direction, more siblings (unfortunately, these last aspects cannot be controlled for in our analyses due to the lack of proper data – information on whether mothers have had siblings is available, but neither on their presence nor on their availability). As a consequence, the effects of maternal age must be examined taking into account also other co-occurring factors.

Table 1: Parenting practices according to maternal age.

	Under 30	30-34	35-36	37 or over	Total
Support for the baby' care:					
employed mothers					
Nursery	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:					
not employed mothers or in maternity leave					
Parents	85.9	84.0	85.0	88.0	85.6
Grandparents and other relatives	10.5	10.8	9.3	6.7	9.9
Nursery, baby sitter	3.6	5.2	5.7	5.2	4.5
Total = 100	3,782	2,088	687	1,057	7,614
Child's month at the mother's return to work					
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	36.0	30.0	29.1	30.5	32.3
Total = 100	5,959	4,784	2,510	1,240	14,793

Table 2: Maternal characteristics according to maternal age.

	Under 30	30-34	35-36	37 or over	Total
% employed at the time of the interview	42.6	58.1	58.6	60.1	52.0
% employed in managerial and professional occupations	6.2	15.1	17.2	22.5	13.7
% with university degree	9.3	25.2	26.5	27.7	19.2
% with economic difficulties (from the birth of the child)	26.9	19.7	19.6	22.5	23.2
% with pre-term or low birth weight child	9.3	8.9	11.1	12.4	9.9

3.2 *Multivariate analyses*

Table 3 (upper part) shows the effect of maternal age on the support for baby's care 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 nursery - in comparison with relatives such as grandparents and this is true for all the parities. As other analyses (not shown here for space reasons) indicate that the difference between the coefficient of nursery and that of baby-sitter is statistically significant, we may also conclude that the order of “preferences” among employed older mothers is: baby-sitter, nursery, relatives. On the contrary, younger mothers are less likely to involve a baby-sitter in the care of their children, but only in the case of second or higher order births.

The lower part of Table 3 considers 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, whereas younger mothers are less likely to involve no-relatives figures, such as nursery and baby-sitter. Actually, the effect regarding younger mothers is confirmed only for second or higher order parity, whereas, that of older ones is present only for the first child.

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

All parity			First birth		Second or higher order births	
EMPLOYED MOTHERS						
	Nursery/ relatives	Baby-sitter/ relatives	Nursery/ relatives	Baby-sitter/ relatives	Nursery/ relatives	Baby-sitter/ relatives
Maternal age						
Under 30	-0.12*	-0.34***	-0.10	-0.22	-0.16	-0.43**
30-34 (ref.)	0.00	0.00	0.00	0.00	0.00	0.00
35-36	0.06	0.24*	0.21	0.44*	-0.06	0.11
37 or over	0.28***	0.73***	0.31**	0.94***	0.25**	0.63***
MOTHERS WHO ARE NOT EMPLOYED OR WHO ARE IN MATERNITY LEAVE						
	Non-relatives/ Parents	Relatives/ parents	Non-relatives/ Parents	Relatives/ parents	Non-relatives/ Parents	Relatives/ parents
Maternal age						
Under 30	-0.29**	-0.05	-0.18	-0.17	-0.57**	0.13
30-34 (ref.)	0.00	0.00	0.00	0.00	0.00	0.00
35-36	0.19	-0.09	0.40	0.17	0.11	-0.17
37 or over	0.08	-0.44***	-0.32	-0.74***	0.20	-0.28

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

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. More generally, mother’s age is irrelevant for the time spent outside the job market after the childbirth. Analyses not reported here show that 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).

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.

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).

	All parity	First birth	Second or higher order births
Maternal age			
Under 30	0.04	0.01	0.11
30-34 (ref.)	0.00	0.00	0.000
35-36	0.02	0.08	-0.01
37 or over	-0.09	-0.09	-0.06

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

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 day).

	All parity	First birth	Second or higher order births
Maternal age			
Under 30	0.028**	0.032***	0.020
30-34 (ref.)	0.000	0.000	0.00
35-36	-0.008	-0.022	-0.003
37 or over	-0.001	-0.002	-0.005

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

4 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 nursery. 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 limited to 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 and the cohort/age mechanism suggested to explain our hypothesis does not seem to operate.

However, these results have to be read with caution. With respect to the return to work, we do not consider, for example, how many employed women have left definitively their work after the childbearing or whether there is a change from full to part-time job. Moreover, with respect to the support for the baby's care, it is possible that our estimates are biased because of omitted variables. From one hand, children of older mothers probably have older grandparents, who may be dead or may be less able to care the baby. From the other hand, older mothers may have less dependent relationships with their own parents. 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.

Finally, as regards the fathers, our results suggest that older mothers do not present different involvement in the daily life of their child's father. However, 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.

Clearly, further investigations are needed in order to study more in depth these behaviours. First, as suggested above, we need more proper data; in particular, some important aspects, such as the family network availability and return to work, should be controlled for. In addition, data which allows us to distinguish a cohort effect from a life-course 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.

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