

# Should Grandparents Take Care of Their Grandchildren? The Effects of Grandparental Childcare on Early Language Development.

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## Short abstract

Early childhood inequalities strongly predict later inequalities. Part of these inequalities at the starting gate may be due to children's different modes of childcare. Informal childcare, and particularly grandparental childcare, is often perceived as a low-quality mode of childcare. In this article, we investigate the effects of grandparental childcare on young children's language development using data from the French birth cohort survey, the *Etude longitudinale française depuis l'enfance*. Our results show that grandparental childcare seems to have a positive effect on early language development compared to parental childcare. However, children taken care by their grandparents have lower language development scores compared to children in formal childcare.

## Long abstract

### Introduction

Early childhood inequalities appear to predict later-life inequalities (Heckman, 2013). Part of these inequalities at the starting gate may be due to children's mode and quality of childcare (Heckman 2011; Vandell, Belsky, Burchinal, Steinberg and Vandergrift, 2010; Melhuish, Phan, Sylva, Sammons, Siraj-Blatchford and Taggart, 2008). Informal childcare, and particularly grandparental childcare, is often described and perceived as a "low quality" mode of childcare (Bassok, Fitzpatrick, Greeberg, and Loeb, 2016). In this article, we investigate the effects of grandparental childcare and their involvement in childcare activities on young children's language development using newly available data from the French birth cohort survey, the *Etude longitudinale française depuis l'enfance* (Elfe).

### Theoretical background and research question

In France, parents have specific hierarchies of what are the "best" modes of childcare: they tend to place formal collective childcare (e.g. *crèches*) above other modes of childcare (especially individual childcare such as nannies), as they expect their children to be better prepared for school (Cartier, Collet, Czerny, Gilbert, Lechien, and Monchatre, 2017). In other terms, collective modes of childcare are perceived as higher quality compared to individual ones. From that perspective, grandparental childcare is perceived as a low-quality childcare: it is not provided by a state-controlled professional caregiver and does not fit with any educational purpose. This could explain why grandparents as main caregivers is a rare situation. In France, only 3% percent of under-3-year-old children are mainly looked after by their grandparents (Villaume, and Legendre, 2014).

Is it a good strategy? The literature shows that children would surely benefit from high-quality childcare. Early childhood inequalities are highly correlated with subsequent inequalities. Early-childhood-oriented programs could reduce these inequalities at the starting gate by improving children's cognitive development, especially for the more disadvantaged ones (Heckman, 2013). This research has focused on the quality and quantity of formal childcare (whether collective or individual), little work tries to measure the consequences of grandparental involvement in childcare activities on children's development. Are grandparents truly a low-quality form of childcare? Results are mixed: children that are looked after by their grandparents have lower reading and mathematics skills (Loeb, 2016), but

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higher chances to get higher education degrees, if they are looked after by grandparents with a higher level of cultural capital (Mollegaard, and Jaeger, 2015).

In this paper, we propose to explore whether grandparental involvement in childcare activities has an impact on early language development. Our data allow us to have detailed information on what grandparents do with their grandchildren, to compare children who are looked after by diverse modes of childcare, and take account in our analyses of grandparent's characteristics. French context: the collective modes of childcare in particular are relatively homogenous in quality, making comparison easier as you are not comparing to a heterogenous category.

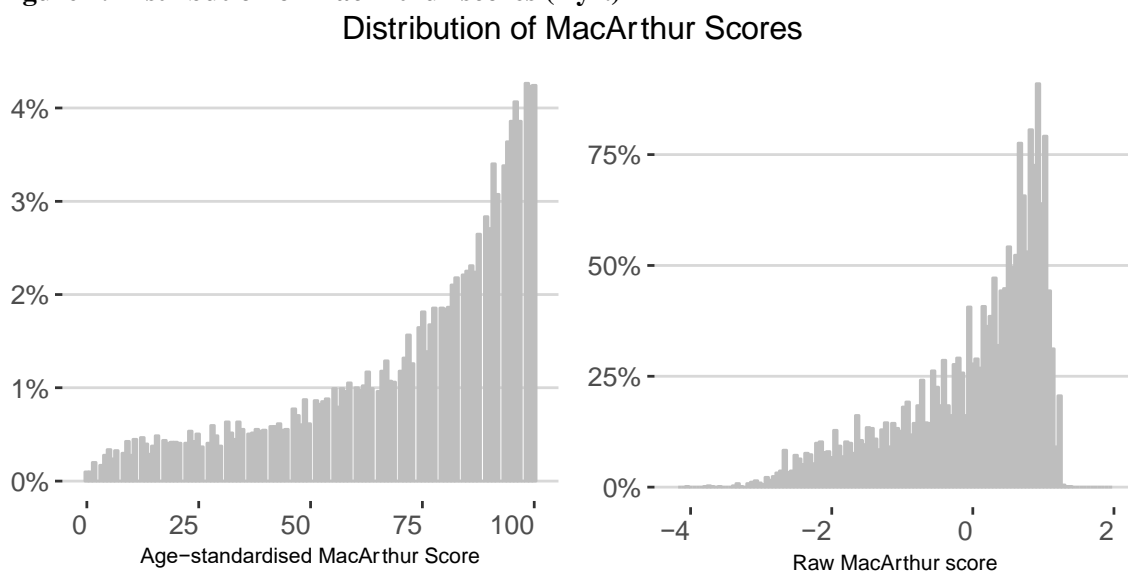
## Data

In this paper, we use data from the ongoing French birth cohort survey, the *Etude longitudinale française depuis l'enfance* (Elfe). This population-based study follows a representative sample of approximately 18,000 children from the time of their birth in 2011; interviews were carried out shortly after birth in the hospital, and by telephone interview roughly 2 months post-birth, and again when the child was about 1 and 2 years of age. It collects data on several topics such as child health, socio-economic position of the household, parenting practices, child outcomes or household living conditions. This paper mainly focuses on data collected on childcare and the extended family's participation in childcare activities at 1 and 2 years of age and children's outcomes at 2 years of age. Our analytical sample is based on 8719 children, who are present in wave 1 and wave 2.

## Measures

We use a validated tool to measure early language development, the MacArthur-Bates Communicative Inventory, implemented when children were about 2 years of age. The primary caregiver (usually the mother) responds to short, French version of the Inventory (Kern, 2003; Kern et al., 2010), a tool to capture expressive vocabulary through parent reports whether the child could spontaneously produce words from a set list of one hundred words. **Figure 1** show the distribution of language development scores.

**Figure 1. Distribution of MacArthur scores (2 yr.)**



We use OLS models to explain differences in language development scores. These scores are age-standardized. Model 1 uses child's *main* caregiver as explanatory variable (measured as the mode of childcare where the child spend most of his time at 1 year). Model 2 uses whether the maternal grandmother are involved in the child's life (measured as the fact that they have regularly taken care of

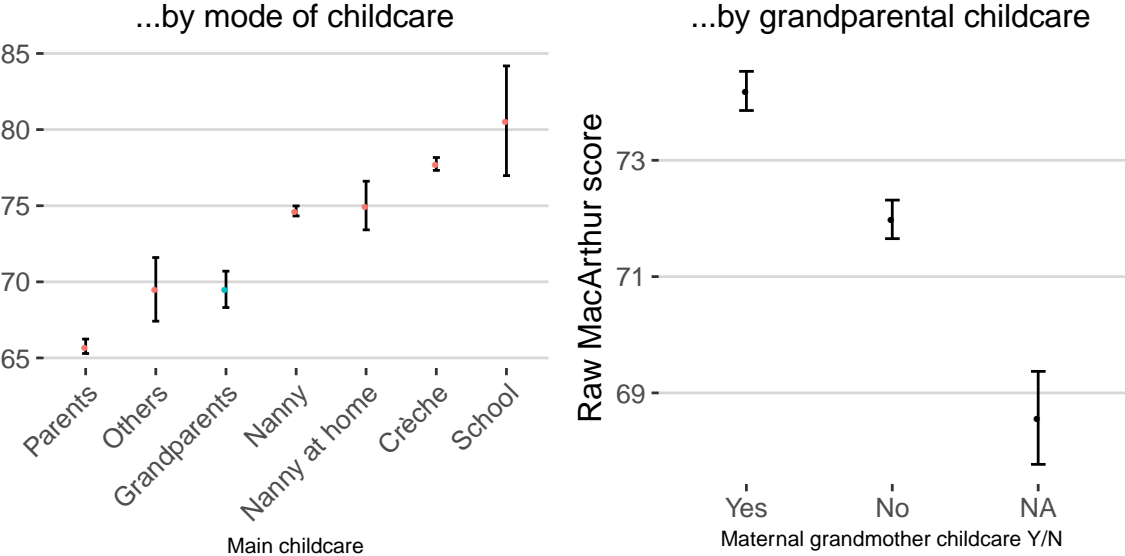
by the child during her first year of life<sup>2</sup>), whether they are the main caregiver or not (NA includes grandmothers who are not alive)<sup>3</sup>. In both models, we introduce child’s sex, child’s birthweight, mother’s educational attainment, family income, language spoken at home and cohabitation with grandparents as control variables.

**Results**

Mothers rarely declared grandparents as the ideal mode of childcare for their child: shortly after birth, only 3% of the parents declared “a member of the family” other than themselves as the form of childcare they would prefer<sup>4</sup>. Perhaps as a consequence, grandparents are the primary caregivers of 4% of the children in our sample, at 1 year. Still, results show that parents would like grandparents to be involved in activities with their children, especially in terms of leisure activities, support and transmission of values, and less for activities involving their children’s education (responses at 2 months).

These results confirm that grandparental involvement does not really fit with parents’ educational plans for their children. Parents have a preference for formal childcare (25% for nannies and 24% for *crèches*)<sup>5</sup> and while they would like grandparents to be involved in their children’s lives (particularly through recreational activities), they do not seem to want them to have a primary caregiver role.

**Figure 2. Mean language scores (2 yr.) by mode of childcare (1 yr.)**



**Figure 2** shows children’s mean language scores at 2 years old by mode of childcare at 1 year of age. Children who attended formal childcare, and especially collective formal childcare, have significantly better language development score compared to those who are taken care of by parents. Children whose main childcare is their grandparents are somewhere in between: they have lower scores than children attending formal childcare, but higher scores compared to the group of children whose main childcare is provided by their parents. Figure 3 also shows that, children who are taken care of by their grandparents (even in cases where it is not the primary caregiver) have better language development scores than those who are not.

<sup>2</sup> The final papers uses other variables to measure grandparental involvement in the child’s life such as grandparental involvement in play or support.  
<sup>3</sup> Further analyses will include other grandparents.  
<sup>4</sup> 6% when not taking preference for parental care into account.  
<sup>5</sup> 47% and 42% when not taking preference for parental care into account.

**Table 1. Descriptive statistics of children's main childcare**

Main childcare	Frequency (%)
Parents	27,36
Others	1,38
Grandparents	4,37
Nanny	42,94
Nanny at home	1,82
Crèche	21,86
School	0,29

**Models 1 and 2** introduce several control variables. In doing so, we want to check the robustness of these differences in language scores when taking background differences into account. For instance, the advantage of children who are taken care of by grandparents may just be the result of higher grandparental involvement in more advantaged groups, compared to less advantaged households; thus, the differences in score would be explained by the socio-economic background.

#### **Model 1. OLS Effects of main childcare at 1 yr on language scores at 2 yr.**

	Param.	Std. Err.	
Parents	Ref.		
Nanny	0,25	0,03	***
Crèche	0,33	0,03	***
Grandparents	0,09	0,05	*
Nanny at home	0,13	0,08	*
Others	0,03	0,09	NS
School	0,53	0,20	***

\*p<0.1; \*\*p<0.5; \*\*\*p<0.01; NS: non-significant  
control variables: child's sex, child's birthweight, mother's educational attainment, family income, language spoken at home

#### **Model 2. OLS Effects of grandmother's involvement in childcare activities at 2 yr.**

	Param.	Std. Err.	
No	Ref.		
Yes	0,077	0,020	***

\*p<0.1; \*\*p<0.5; \*\*\*p<0.01; NS: non-significant  
control variables: child's sex, child's birthweight, mother's educational attainment, family income, language spoken at home

OLS regressions show that grandparental childcare is associate with higher language development scores compared to parental childcare; the results is still significant after the introduction of control variables in the model.

## **Conclusions**

These preliminary results confirm the disadvantage of children whose primary caregivers are grandparents compared to those attending (collective) formal childcare. An explanation could be the

(high-)quality of formal childcare in France. However, the involvement of grandmothers in caring activities, even as a complementary mode of childcare, seems to benefit children. This could be interpreted as a benefit of grandparenting activities on child development. Further analysis will compare the impact of different forms of grandparenting activities (support, play, childcare) on child language development. We will also distinguish the different branches of the family to measure the differential effect of maternal grandmother involvement, maternal grandfather involvement, paternal grandmother involvement and paternal grandfather involvement. Finally, other specifications of the regressions in the final paper take grandparental cultural capital (and grandparents' socio-economic background in general) into account.

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