

Whose legacy matters and for whom?

The relative contribution of mother's and father's socio-economic status in the educational attainment of the children and grandchildren of immigrants

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Abstract

Recent research on intergenerational social mobility in Western societies tends to show greater social fluidity within immigrant families than within native-born families. Yet, the mechanisms underlying this fluidity gap remain unexplored. Based on a new large-scale survey oversampling immigrants and their descendants in France, we use sibling correlation and decomposition measures to show that the effect of measurable socioeconomic origin on educational attainment is weaker for immigrants' children than for natives' children. Moreover, while the relative contribution of mothers' SES is equal to or greater than that of fathers' in native-born families, the reverse is true in immigrant families in which father's SES matter more. The gradual erosion of these specificities for immigrants' grandchildren is in line with the neo-classical framework of immigrant integration. We discuss the specific pathways of social reproduction in immigrant families implied by these results.

Background

Intergenerational mobility research measures how parents' social position correlates with that of their children. In increasingly multiethnic Western societies, a growing body of literature has started exploring how social mobility patterns differ between immigrant and non-immigrant families. The majority of studies find social fluidity to be higher in immigrant families (see Ferry and Ichou forthcoming), but the mechanisms underlying this difference remain unclear and under-researched. In this paper, we explore one such mechanism: the relative influence of mother's and father's socioeconomic status on their children's educational attainment. If, in immigrant families, one of the parents transmits his/her position less effectively to their children, this could contribute to explaining the higher observed social fluidity in these families.

Most of existing studies on the respective role of each parent in social mobility have focused on native populations of industrialized countries (Beller 2009; Erikson 1984; Goldthorpe 1983; Korupp et al. 2002; Thaning and Hällsten 2020), ignoring the potentially specific pathways of social reproduction among immigrant families.

Based on full sibship data from the French *Trajectoires and Origines 2019-2020* survey (Beauchemin et al. 2022), we use sibling correlation and decomposition measures to analyze the respective contribution of both fathers' and mothers' SES on children's educational attainment and how they vary by migration status. We distinguish children according to their parents' or grandparents' migration status and geographical origins. Our results point to the specificity of social mobility pathways among immigrants' children (second generation, G2) that gradually reduces for immigrants' grandchildren (third generation, G3), in line with the neo-classical assimilation theory.

Research questions

In this paper we assess the extent to which measurable parental socioeconomic background, i.e. parents' educational attainment and occupational status, contributes to the total family effect on children's educational attainment, distinguishing between natives' children (G4+), immigrants' children (G2) and grandchildren (G3). We differentiate between mothers' and fathers' position and assess their net contribution to their children's educational attainment.

- *To what extent do educational and occupational origins explain children's educational attainment, depending on immigrant status and geographic origins?*
- *How do each mothers' and fathers' SES contribute to the total effect of family background on children's educational attainment depending on immigrant status and geographic origins?*

Data and method

We use data from the new *Trajectoires et Origines 2019-2020* survey, a nationally-representative survey oversampling immigrants and their descendants in France. One quality of this survey is to gather information on all of the respondents' children.

We measure educational attainment among respondents' children aged at least 23 years old. Parents' occupational position is measured using the current occupational position in France and is transformed in the International Socio-Economic Index and education. We use ranked transformed versions of these measures both for children and parents, following Bukodi and Goldthorpe (2016) who deem education as a "positional good" and in line with recent empirical research showing the higher stability of mobility estimates using SES ranks (Chetty et al. 2014). Our ranks are sex- and cohort- specific. As reference population-level distributions, we use the French *Emploi* survey from 2019 (for ISEI ranks), and the Barro-Lee educational attainment dataset (for educational attainment). For immigrant parents, we use the educational distributions of their country of origin as our reference distribution, based on previous literature highlighting the positive educational selectivity of immigrants and its effects on their children's educational mobility (Ichou 2014).

We distinguish children according to whether they have two immigrant parents (G2.0), one immigrant parent (G2.5) or at least one immigrant grandparent (G3). Other children are labelled as natives' children (4G+). We also differentiate immigrant groups according to their country of origin categorized as North Africa, Southern Europe and other countries. Due to sample limitations, we do not distinguish G2.0 and G2.5 when decomposing models by geographical origin. Because our method relies in sibling correlations, we drop singletons. Our total subsample is composed of 6,189 children.

We compute multilevel models for each of these groups where the dependent variable is children's educational rank to compute sibling correlations where in our *baseline models* we control for children's age, birth order and sex. From these models we compute the Intra-Class Correlation coefficient which we interpret as the total effect of family background on children's educational attainment. Next, we compute *full models* where we add fathers' and mothers' educational and ISEI ranks as covariates. We use Mazumder's decomposition method (2008) to calculate the percentage of *gross contribution* of these measurable socioeconomic origins on the total effect of family background. We also compute *occupational background-specific* and *educational background-specific* models to assess to which extent the gross contributions of each of these socioeconomic dimensions contribute to the total family background. Finally, we compute the percentage of *net contributions* of fathers' and mothers' educational ranks and their overlap to the total family background and to the total educational background, based on Hällsten and Thaning's method (2022).

Main findings

The gross contributions of parents' educational and occupational origins on children's educational rank by generational status

The ICC of the empty models presented in Table 1 indicate that among natives 45 percent of children's educational rank is explained by the total family background. This proportion varies slightly for immigrants' descendants but not statistically significantly (using Fisher z transformation).

Table 1 – Gross contributions of fathers' and mothers' occupational and educational positions to the total family background effect on children's educational attainment

Immigrant status	4G+ (natives)	G2.0	G2.5	G3
N observations	732	873	848	812
ICC (baseline)	44,7	51,4	46,8	48,7
<i>95% significance difference between groups</i>	<i>Ref</i>	<i>False</i>	<i>False</i>	<i>False</i>
Gross contribution of educational origins (%)	48,5	20,0	22,7	44,2
<i>95% significance difference between groups</i>	<i>Ref</i>	<i>True</i>	<i>True</i>	<i>False</i>
Gross contribution of occupational origins (%)	22,5	16,5	9,2	27,3
<i>95% significance difference between groups</i>	<i>Ref</i>	<i>True</i>	<i>True</i>	<i>False</i>
Gross contribution of edu & occup origins (%)	49,0	24,8	18,5	47,2
<i>95% significance difference between groups</i>	<i>Ref</i>	<i>True</i>	<i>True</i>	<i>False</i>

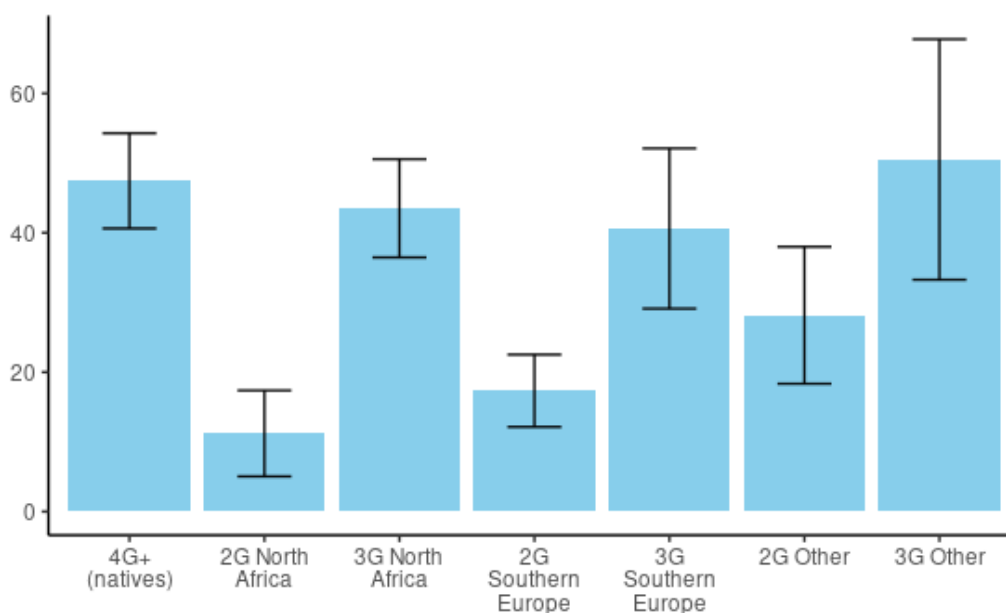
Note: Significance tests are performed using Fisher-z transformations for the ICC and bootstrapping procedures for the gross contributions

When introducing parental ISEI and education in the models, the gross contribution percentage indicates that, among natives, overall parental SES explain 49 percent of the total family background when considering both mothers' and fathers' ISEI and educational position. This proportion is substantially smaller for children and grandchildren of immigrants, though grandchildren of immigrants come closer to natives. Figure 1 presents

the percentage of the total gross contribution of parental SES on children’s educational attainment and explores these patterns by immigrants’ geographic origins, confirming that parents’ socioeconomic position has a higher contribution on the total family background effect when stratifying immigrants’ children and grandchildren by origin.

Table 1 also presents gross decompositions by parental education and ISEI separately. Overall, for all considered groups (natives and immigrants’ descendants), parental education plays a far greater role in explaining the total effect of family background on children’s educational attainment than parent’s occupational status. In other words, children’s educational position is best accounted for by parental educational attainment.

Figure 1 – Gross contribution of parental socioeconomic background to the total family background effect on children’s educational attainment by immigrant origin



Variations of the net contributions of mothers’ and fathers’ education on children’s educational rank

In Table 2, we turn to the respective net contributions of mothers’ and fathers’ educational attainment on children’s attainment. Line 1 shows the overall gross contribution of parental education on the total family background. Lines 2 to 4 decompose these gross contributions into the net contributions of each parent. The sum of these net contributions amounts to the gross contribution. Lines 5, 6 and 8 show these net contributions relative to the gross contribution (i.e. their sum equals 100).

Table 2 - Net contribution of fathers’ and mothers’ educational rank to the effect of educational background on children’s attainment

Immigrant status	Line number	4G+ (natives)	G2.0	G2.5	G3
N observations		732	873	848	812
Gross contribution of educational origins (%)	1	48,5	20,0	22,7	44,2
Net contribution of father's education (%)	2	9,7	9,0	11,8	10,2
Net contribution of mother's education (%)	3	17,4	3,1	2,9	13,1
Net contribution of parental education overlap (%)	4	21,4	7,9	7,9	20,9
Net contribution of father's education relative to gross explained contribution (%)	5	20,0	44,8	52,1	23,2
Net contribution of mother's education relative to gross explained contribution (%)	6	35,8	15,6	13,0	29,6
95% significance test of difference between lines 5 & 6	7	<i>False</i>	<i>True</i>	<i>True</i>	<i>False</i>
Net contribution of overlap relative to gross explained contribution (%)	8	44,1	39,6	34,9	47,3

Note: Significance tests are performed using a bootstrapping technique considering the layer of the multilevel models.

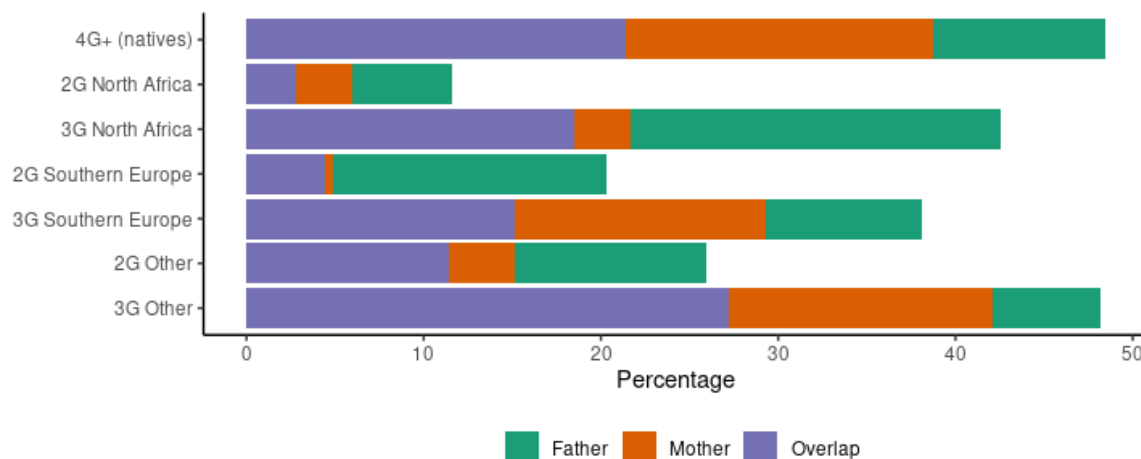
Among natives, mothers’ educational attainment accounts for a larger share of the family educational background compared to father’s, a pattern also visible for grandchildren of immigrants (though these differences are not statistically significant). Yet, among children of immigrants, irrespective of the number of

immigrant parents, this pattern is reversed, as fathers' educational attainment account for a larger share of the effect of educational background.

Note that the overlap between mothers' and fathers' educational position, i.e. the joint effect of parents' educational position on children's attainment accounts for a substantial share of the effect of educational background.

Figure 2 depicts these decompositions by origins among immigrant descendants, showing that the higher effect of fathers is present for G2 children irrespective of the origins of immigrant parents.

Figure 2 – Gross contribution of educational origins to the total family background effect on children's attainment and net decompositions by parents



Note: the length of the bars shows the gross contribution of parental educational origins to the total family background effect (line 1 in Table 2). The bars are decomposed according to the net contribution of father's and mother's education (lines 2 to 4).

Conclusion

Overall, the total effect of family background on children's educational attainment does not vary between natives and immigrants' descendants. Yet, the contribution of measurable socioeconomic parental origins is larger among natives than immigrants' children but not immigrants' grandchildren. Besides, while the net contribution of each parent to children's attainment is equal or tends to be slightly larger for mothers among natives and immigrants' grandchildren, the net contribution of fathers' socioeconomic background is larger among immigrants' children.

These results point to specific mechanisms of intergenerational transmission in immigrant families, with a convergence towards the French natives in the third generation. Discrimination processes and/or community-based mechanisms may specifically affect immigrant's children and are not captured here using measurable parental socioeconomic background. Besides, while the greater contribution of mother's education in explaining children's attainment is in line with the existing sociology of education, we uncovered a reversed pattern in immigrant families in which father's education matters more. This could be due to the fact that fathers might more often have higher educational attainment than mothers in immigrant families, more so than in native families. Finally, the gradual convergence immigrants' descendants' mobility patterns to the natives' is in line with the neo-classical framework of socioeconomic integration.

In additional analyses, we will examine whether the effect of parents' position differs when considering their educational rank from their country of origin or in their country of arrival. We will also examine brothers' and sisters' correlation separately to account for the possible gendered transmission of intergenerational advantage.

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