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# **Title: Entry into motherhood and completed fertility of Second Generation Immigrants in France**

## **Extended Abstract**

## **Research** question

In France, the fertility of immigrant women is higher than that of French women, but since only a small minority of the population is concerned, the effect on overall fertility is minimal (Heran and Pison, 2006). While fertility behaviors have been extensively examined for first generation immigrants, much less attention has been paid to the second generation. This paper studies the transmission of first-generation immigrants' fertility behavior to second-generation women and men. Based on the idea that fertility is an important component of the integration of immigrants (and second generation immigrants) into their host society (Massey, 1981), the main question answered is twofold: first, to what extent the children of immigrants have assimilated to host-country norms in terms of age at entrance into motherhood and completed fertility; second, to what extent are observed differences due to structural determinants (such as their belonging to disadvantaged social milieu or their lower level of education). To what extend the descendant relatives of immigrants, who are born and socialized in metropolitan France, reproduce their parents' fertility behavior, or that of the mainstream population, once taking into account their social background? To answer this question it analyses both the timing of first childbearing and the fertility reached at age 40 among different groups: descendents of North African immigrants, descendents of southern European immigrants, descendents of UE immigrants and mainstream population, i.e. French-born with French parents. As these children of immigrants are coming of age, it is now possible to compare their completed fertility with those of French natives.

Our research design uses the Trajectories and Origins survey, a survey on population diversity in France conducted in 2008 on a sample of 22,000 persons aged 18-60 and living in metropolitan France.

## Data and sample selection

Our research design uses the Trajectories and Origins survey, a survey on population diversity in France conducted in 2008 on a sample of 22,000 persons aged 18-60 and living in metropolitan France. The survey examines the living conditions and social trajectories of immigrants, sons and daughters of immigrants born in France and members of the mainstream population (neither immigrants, nor children of immigrants). It places special emphasis on tracking individuals' educational, occupational, residential, conjugal, familial, and health trajectories. Central to the survey's analyses are the destinies of immigrants' children compared to those of their parents. The data contains standard socio-demographic information and includes retrospective individual biographical data concerning family, residential and employment history.

To study the timing of first birth all women and men aged 18-50 are selected. To study completed fertility, the sample is restricted to individuals who are at least 40 years old at the date of the survey. This age limit is defined in order to focus on people who are assumed to

have completed their fertility. Indeed in France, female fertility is low after age  $40^1$ . Male fertility may be not completed, but the same age limit is chosen to ensure consistency and to ensure a large number of observations.

## Empirical strategy

The *timing of first childbearing* is estimated through Cox proportional hazards models (Cox, 1972). The dependent variable is the transition to first birth. People are followed from the age of 16 and right-censored at the date of interview. In order to analyse *the level of fertility at 40*, an ordered polytomic model is estimated. The dependent variable is the number of children individuals have had near the end of their reproductive life, *i.e.* at age 40.

In all these models, the same set of control covariates is used<sup>2</sup>. Above origin separating French natives from second generation and immigrants, characteristics of the family of origin include the number of siblings and the importance of religion during childhood. The level of education is introduced with four dummy variables: no education, low education (primary), professional secondary education, general secondary education and high education (university). The age at first union formation is added.

## First results

Up to now, only descriptive results are available. Multivariate analysis is ongoing. First results show that fertility varies by immigrant generation, with significant declines between the first and subsequent generations: childbearing behaviours of second generation immigrants are much closer than that of French natives. On average, second generation men even have fewer children (1.5) than the mainstream population (1.7), contrary to their female counterpart who have as many children as the French native women (1,9).

Average number of children at age 40, by origin										
Origin	Men	Ν	Women	Ν	Total	Ν				
North African immigrants (Algeria, Tunisia, Morocco)	2.7	452	3.3	495	3.0	947				
Southern Europe immigrants (Spain, Italy, Portugal)	2.0	258	2.1	280	2.1	538				
Other countries from UE27	1.4	166	1.7	285	1.6	451				
Total (immigrants)	2.3	876	2.6	1060	2.4	1936				
Second generation immigrants North Africa (Algeria, Tunisia, Morocco)	1.6	151	2.3	220	2.0	371				
Second generation immigrants Southern Europe (Spain, Italy, Portugal)	1.4	382	1.9	415	1.7	797				
Second generation immigrants Other countries from UE27	1.6	135	1.6	142	1.6	277				
Total (second generation)	1.5	668	1.9	777	1.7	1445				
French Natives (mainstream population)	1.7	809	1.9	962	1.8	1771				

Source : Enquête Trajectoires et Origines, INED-INSEE, 2008.

Sample: Immigrants (arrived in France after age 11), second generation immigrants and French natives, aged 40-50.

<sup>&</sup>lt;sup>1</sup> In 2004, the age-specific fertility rate, i.e. the number of births per 100 women over a given age range, was 6.4 per 100 women aged 40 and over, against 64.3 per 100 women aged 25-29, and 60.4 per hundred women aged 30-34 [Insee, Bilan démographique]. In our sample, fewer than 7% of men and 2% of women had children after age 40.

<sup>&</sup>lt;sup>2</sup> These covariates are added one set at a time.

But differences appear if we take into account their parents' country of origin. Those whose
parents came from North Africa have a higher fertility rate than those whose parents originate
from Southern Europe.

Distribution of number of children at age 40, by origin										
Origin	0	1	2	3	4	5	6 +	Total	Ν	
North African immigrants (Algeria, Tunisia, Morocco)	11.6	12.4	17.0	22.0	17.5	9.5	10.0	100	947	
Southern Europe immigrants (Spain, Italy, Portugal)	7.6	18.5	43.5	21.8	6.4	1.4	0.7	100	538	
Other countries from UE27	23.2	22.5	33.2	16.0	4.0	0.4	0.9	100	451	
Total (immigrants)	13.0	16.2	27.5	20.7	11.7	5.4	5.6	100	1936	
Second generation immigrants North Africa (Algeria, Tunisia, Morocco)	20.2	17.1	28.6	22.5	4.3	6.5	0.8	100	371	
Second generation immigrants Southern Europe (Spain, Italy, Portugal)	18.7	17.1	45.9	16.1	1.5	0.6	0.2	100	797	
Second generation immigrants Other countries from UE27	18.5	24.2	36.9	19.1	1.0	0.2	0.1	100	277	
Total (second generation)	18.9	19.3	40.0	18.2	1.9	1.5	0.3	100	1445	
French Natives	17.4	18.3	40.5	18.2	3.9	1.2	0.5	100	1771	

Source : Enquête Trajectoires et Origines, INED-INSEE, 2008.

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