

Education, employment and childlessness

The relationship between employment, educational field, educational level and childlessness among Greek women born in 1955-1959

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ABSTRACT

Introduction

There is a lot of interest in the relationship between education and permanent childlessness since low fertility levels persist and the share of women among individuals with a higher education is growing.

Fertility patterns show that very low fertility has become a rather structural characteristic of the demographic regime in Greece. The combination of a later timing with less intensity, for successive cohorts has led to very low levels in the total fertility rate. For instance, at the same age (<33) the first birth probability of women born in the late 1950's was 82.3 while the corresponding figure for those born ten year later was only 72.3. In the above mentioned time span of 10 years, the proportion of women with tertiary education has increased from 20.3% (1955-59 cohorts) to 33% for those born over 1965-69.

Based on the analysis performed by Hoem, Neyer and Andersson¹ for Sweden, we study the relationships between educational attainment, educational field and fertility for the case of Greece. Moreover, we emphasise the combined role of both educational field and occupation for the observed fertility diversities among women.

¹ Hoem, J.M., Neyer, G., and Andersson, G. (2006), Education and childlessness: The relationship between educational field, educational level and childlessness among Swedish women born in 1955-1959. *Demographic Research*, 14(15) 331-380.

Data and method

Our empirical investigation is based on census data (2001) pertaining to childbearing, educational and employment histories of an entire cohort of women born in Greece in 1955-1959 (about 350,000 individuals). Data on educational field are available for about 60,000, i.e. 17% of the entire cohort. We work with a relatively high number of educational field-and-level combinations (some fifty in all) as well as with several employment categories. Permanent childlessness is examined as the main fertility indicator.

The role of employment in childlessness diversities is analysed for women awarded a university degree by emphasising three particular aspects: a) the distinction between occupation in public and private sector, b) the different proportion childless for women employed in the public sector (occupation with low vs. high income prospects) and c) the diversities in permanent childlessness for women employed in private sector mainly in “closed” professions.

For the first aspect, we study differences in fractions childless for women employed as secondary education teachers in the public or “private” sector and mainly for those educated in humanities and natural sciences. In Greece there is a kind of a “parallel” education system providing tuition in private education institutions (called *frontistirio*) as a complement to the secondary public education in order for students to improve their knowledge in particular subjects. In the analysis we compare permanent childlessness for teachers employed in public or private (*frontistirio*) education. The distinction between public and private sector of employment is also studied by analysing the diversities in childlessness among women trained in economics and business and worked as free lance economists or as public service administrative professionals or as customs, tax and related government associated professionals. The results for the two last sub-categories are also used for analysing the second aspect, i.e. the role of occupation with low vs. high income prospects for the different ultimate childlessness of women employed in the public sector. The third aspect is analysed through the difference in fractions childless for women with university educational level, graduated in law and employed in “closed” professions such as public notaries.

Results

The analysis indicates that, in some cases, the field of education serves better as an indicator of a woman’s potential reproductive behaviour than the educational level attained. There are three groups of outliers in terms of childlessness, namely women educated in arts and theology, women that never married and women with research degrees. In general, we find some similarities with the results already obtained for other countries. In particular, women educated in teaching and health care have lower permanent childlessness at each educational level than in any other major grouping. Women educated in arts and in theology have unusually high fractions permanently childless.

The analysis of the combined role of both educational field and occupation for the observed fertility diversities show that women employed as secondary education teachers in the public sector have lower percentages of childlessness than those in private education (16.3% vs. 21.4%). Within the same occupation, this diversity holds true for different educational fields, namely women educated in humanities (16.8% vs. 21.9%) and in natural sciences (13.7% vs. 17.2%). The role of employment sector (private vs. public) is also reflected in the results regarding women with an educational orientation in economics and business. In fact, the women employed as free lance economists remain childless more often (26.3%) than those in public service administrative professions (17.5%) or in customs, tax and related government associated professions (11.4%). It is worth noting that permanent childlessness of women in the last occupation category is among the lowest levels irrespectively of educational level or field of education. It is likely that this result is related to higher income opportunities as compared to other women on the same educational field and employment sector (public). An interesting result is obtained for women educated in law and worked as public notaries, since they have the lowest percentage childless (16.3%) among women in legal professions (28.9% for lawyers and 24.7% for public prosecutors and judges. This diversity is probably related to the fact that, in Greece, notary public is a typical closed profession which is not open to competitive market conditions. Based on population criteria, it is a profession which is transmitted from the retired public notaries to younger public notaries by offering employment security and great prospects for higher incomes.

Discussion and Conclusion

Our results confirm the assumption, already raised by other studies that higher education does not systematically result in higher childlessness. In several cases, educational field is as important as educational level. Among the several factors related to an educational system, which may influence the relationship between education and childlessness, we emphasised the way in which education is related to the labour market and mainly the distinction between employment opportunities in the public and private sector. For the case of Greece, educational field, educational level and occupation characteristics play an important role in shaping women's reproductive behaviour. Moreover, in several cases, women's profession tends to modify the effect of educational field and level on ultimate childlessness. It is obvious that we need to better identify which underlying features associated with occupational characteristics and educational field and level influence fertility behaviour. Within this framework, institutional aspects of labour market must be further analysed in order to underline the different working conditions for women with the same or different education.