Education and Fertility desires in Italy

Alessandro Rosina, Emiliano Sironi, Maria Rita Testa

The aim of this analysis was to investigate which are the variables that affect the choice of having children for young Italian people aged between 18 and 29 years, and in particular exploring and understanding the role of the variable "level of education".

The empirical analysis has been conducted starting from the data of the "Rapporto giovani", a project guided by the *Istituto Superiore Giuseppe Toniolo*, in collaboration with the *Università Cattolica del Sacro Cuore*, which constitutes the most extensive research on the youth world in Italy. The survey has the aim to provide information as well as to understand the challenges that are characterizing the Italian society on a variety of fields ranging from values, future expectations, projects and life choices of young people, their trust in institutions and their role in the society.

In details, our database relies on a sample of 9087 individuals of whom we have analyzed the answers given to two questions: "If you do not have any constrains or impediments of any kind, how many children would you like to have?" and "Realistically, how many children would you like to have during your entire life?"; moreover we have also considered the difference among the answers given to the two above mentioned questions. Hence, the difference between the first two items is positive if the number of desired children without constraints is greater than the number of expected children taking into account the realistic prospective. Furthermore, the higher is the gap between desires and realistic expectations, the higher is the value of the dependent variable illustrated in the third model of Table 1.

The variables, usually presented in the literature, which may play a role in affecting the decision of having a child are gender, age, marital status, level of education, employment, religion, geographic area, level of education of parents and finally the positive or negative attitudes towards the idea of having a family.

We have conducted a statistical analysis by implementing a set of ordered logistic regressions, differentiating by gender. The results show that the age plays a relevant role especially for the female subsample, indeed as the age increases, it negatively affects the realistic number of expected children and its difference with the desired number of children. This may be explained

by the fact that, while growing up, people (and especially women) tend to revise their expectations of having children to a lower grade, by completely renouncing or modifying their initial desire. Another interesting aspect is that the marital status (i.e. being married or not) is significant for both males and females only for predicting the dependent variable "Realistically how many children would you like to have during your entire life?". This suggests that when considering their choices of having children from a real point of view, having a partner and a stable relationship is relevant.

Furthermore, as expected, being religious, having positive attitudes towards family and the presence of children are all aspects which positive influence both the desired as well as the realistically expected number of children.

Looking at the role of "geographic area", we have noticed that it has a negative effect on the dependent variables, and this effect has a stronger magnitude for those coming from the northern part of the country.

As far as it concerns our variable of interest (i.e. level of education) it is always significant (except in the case of females in the second item); in details the analysis show that having a higher level of education, a degree or more, positively affects the preferences about having children. Nevertheless, more educated individuals also experience a higher gap between the number of desired children without any constraints and the number of children that individuals realistically think to have.

Our results support the hypothesis that education is positively associated with the demand for children: education is positively correlated with the desires for children but not with the expected number of children among women;

The gap between desired and expected family size increases with level of education especially among women; A possible interpretation is that women with a higher level of education tend to be more oriented towards professional achievement and desire larger family size but they are also aware of the difficulties they will face in combining work with family size preferences and thus adjust consistently their reproductive choices

Finally, looking at the relationship between the employment/study situation of the interviewed and the desires of fertility, it emerges that being in the condition of NEET (Not in Education, Employment, or Training) negatively influences the preferences on the number of children in

both the explored items; this is obviously explained by the fact that do not having a stable economic situation plays a negative role on the expectations of fertility.

To conclude, the results of our empirical analysis agree with the literature by confirming the fact that variables like age, marital status, religiosity, employment, attitudes towards family are all aspects that play a relevant role in influencing the choice of having children for young Italian people; moreover our results support the evidence that the level of education affects the number of desired children, in particular, higher level of education of the interviewed are usually associated with an higher desired number of children.

Table.1 Results of ordered logistic regressions for predicting the number of desired children

LOGIT BY GENDER	If you do not have any constrains or impediment of any kind, how many children would you like to have?		Realistically, how many children would you like to have during your entire life?”		Difference between the number of desired children without any constrains or impediments and the realistically number of desired children	
	Males	Females	Males	Females	Males	Females
Age						
18-20	0	0	0	0	0	0
21-23	0.087	0.057	0.072	-0.108	0.013	0.220**
24-26	0.034	0.109	-0.119	-0.269***	0.159	0.421***
27-30	0.14	0.090	-0.329***	-0.612***	0.535***	0.698***
Marital status						
Not married	0	0	0	0	0	0
Married	0.612***	0.143	0.394**	0.308**	0.163	0.012
Employment						
Student	0	0	0	0	0	0
Neet	-.0201**	-0.365***	0.033	-0.343***	-0.399***	-0.151*
Worker	-0.345***	-.0398***	-0.050	-0.182**	-0.385***	-0.345***
Worker and student	0.067	0.043	0.096	-0.065	-0.195	0.046
Geographic area						
South	0	0	0	0	0	0
Center	-.0287***	-0.40***	-0.402***	-0.511***	0.108	0.010
North	-0.468***	-0.342***	-0.594***	-0.475***	0.022	0.079
Level of education						
Less than Secondary Education	0	0	0	0	0	0
Secondary Education	0.371***	0.369***	0.139**	0.040	0.443***	0.461***
Tertiary Education	0.507***	0.541***	0.286***	0.011	0.423***	0.694***
Level of education parents						
Less than Secondary Education for both the parents	0	0	0	0	0	0
Secondary Education or more	0.101**	0.040	0.123***	0.026	-0.007	0.004
Number of children	0.914***	0.549***	0.936***	0.635***	0.447**	0.188
Religiosity						
Not religious	0	0	0	0	0	0
Believer	0.349***	0.371***	0.434***	0.545***	0.052	-0.131
Attitudes towards family						
Positive attitudes	0.225***	0.326***	0.279***	0.455***	-0.035	0.017
Negative attitudes	-0.328***	-0.062	-0.361**	-.0964*	-0.067	-0.074
Number of observations						9087

Note: *** indicates a level of significance equal to 1%, ** indicates a level of significance equal to 5%, * indicates a level of significance equal to 10%.