

EXTENDED ABSTRACT**Educational Expansion, Social Classes and Reproductive Patterns in Low Fertility Settings: Theoretical Framework and Empirical Analysis With Use of Polish GGS Data.**

Krzysztof Tymicki, *Institute of Statistics and Demography, Warsaw School of Economics*
Maciej Gdula, *Institute of Sociology, University of Warsaw*

Background and research goals

Fertility decline in eastern European countries after socio-economic changes of 1989 has been accompanied by rapid educational expansion. As reported by OECD, among individuals born in Poland between 1948-1957 there were only 13% with higher level of education whereas this same figure for cohort 1968- 1977 and 1978-1987 yields 26% and 41% respectively (OECD, 2014). These changes were related mostly to pursue for higher education resulting from individual expectations that upward educational mobility produces higher income and more stable employment. However, as some sociologists argue, there is growing mismatch between educational structure and demand for employees on the labour market (Domański, 2009). Moreover inter-generational mobility with respect to level of education does not have to be related to increase in the amount of social, economic and cultural capital. It may be argued that upward educational mobility might influence only so called institutionalized cultural capital. This is of particular importance since most of demographic analyses assume that level of education serves as a fairly good proxy variable for norms, values, labour market performance and opportunity costs as well as time shifts in the individual life course (postponement of demographic events). Recent attempts to decompose the effect of changes in educational structure of females on completed fertility shows that in most cases fertility would be higher in the absence of educational expansion (Brzozowska 2014). This result is complementary with statistical models build with micro level data that usually show negative educational gradient with respect to individual fertility.

Since impact of education is statistically significant regardless the expansion process question arises what is actually captured by this variable? Is this mostly effect of proliferation of norms and values related to childbearing, childrearing and family formation, the effect of labour market performance or finally time shifts on the individual life-course resulting in postponement. Therefore, this is actually question about validity of education attainment as a variable and interpretation of its' effect both on individual behaviour and perception of norms and values.

Taking that into account, in the present research we would like to focus on use of social class as an alternative measure which presumably might more valid than level of education in capturing differences with respect to individual labour market performance, norms, values and attitudes towards childbearing and family formation. Moreover, the effect of social class might be easier to interpret since this notion is deeply rooted within sociological theory. The major goal of the study is accomplished by incorporation of social class in statistical models aimed at explanation of such outcomes as fertility intentions, number of children or attitudes towards selected normative statements.

Theoretical background

In the study we use theory of social classes proposed by Pierre Bourdieu (Bourdieu 1980, 2005, Bourdieu and Passeron 1990). Main advantage of proposed approach is that it integrates social, economic and cultural perspectives on reproduction and at this same time refers to various dimensions of social stratification. The theoretical concept of class system developed by Bourdieu is one among the most cited and recognized theories of social structure. It is often employed in research in such diversified fields as family relationships (Illouz 1998), culture (Bennett et. al 2009) or politics (Sadura 2010). The advantage of Bourdieu's theory relies on integrating diversified dimensions of social stratification and social divisions elaborated separately by different theories of social structure. Combining economic, cultural and social dimension enables to develop precise definition of classes and to grasp different practices and strategies deployed by representatives of each social classes. Bourdieu constructs three social classes (higher, middle and popular) with use of three main forms of capital: economic, cultural and social. Economic capital consists of property and incomes. Cultural capital comprises formal education (institutionalized cultural capital), competence in legitimate culture (literature, painting, music) and embodies principles of taste

(embodied cultural capital). Social capital is a network of social relations, which relates an individual with others.

We accept after Bourdieu that the relationships between the classes are of competitive nature. The primary objective of the competition is to maintain or change the position in the class system (upward mobility). This objective is carried out by a multi-dimensional practices including competition for scarce resources, taking positions on the labour market, struggles for recognition of cultural practices and the effort to change certain areas of social life. Family and having children is one of the key dimensions of the competition and the reproduction of social classes. The choice of marriage stands as a confirmation of the proximity between positions in the class structure and emphasis of the borders separating worlds of classes from each other (Bourdieu 2005). Having children and decision concerning their number is crucial from the point of view of social inheritance, both in the material and symbolic realm (Bertaux, Thompson 2009). Educational strategies are an expression of the aspirations of parents and affect the life opportunities of children (Bourdieu 1990).

The living conditions and life-styles determine certain patterns of fertility and educational strategies of each class (Bourdieu 2005). Within this theory both the upper class and the popular class have are expected to have higher fertility than the middle class. It results from a mix of resources available to those classes and undertaken strategies. In the case of higher class an option of having more children is determined by both economic position and a high level of cultural capital transmitted in the family which makes it easier for children to achieve high performance in the education system. Popular class can afford more children, as having them is not related with high aspirations for upward mobility in social structure, which results in lower expenditures on investments in children. The basic strategy of the middle class is to reduce the number of children and investing in their skills and abilities to increase their chances in upward mobility.

Taking into account state of pre-existing research it has to be stressed, that there are only sparse examples of research directly dealing with issue of class differences in fertility patterns (Szreter 2002). Most of up to date research is mostly focused on changes in the class structure of society (Gdula 2012, Sadura 2010, Domański 2000, 2004), differences in values among social classes (Domański 2009) or relation between social class and life-style (Gdula, Sadura 2012). The only existing research project explicitly applying social class perspective in demography is in the phase of preliminary research (Billari et al. 2015). Therefore, we propose to use social class approach to analyse reproductive patterns in low fertility settings. We propose Bourdieu's social class theory since it has direct reference to reproductive strategies, which are considered to be manifestation of class specific habitus defined as set of norms, behaviours and strategies. Individuals are ascribed to social classes by level of economic, social and cultural capital therefore education is just one of the components of cultural capital as well as overall position in social stratification. Thus, social class, in our opinion might serve as by far better explanatory variable with respect to differences in reproductive behaviour and moreover it gives clear predictions about differences in individual decisions concerning childbearing and childrearing.

Data and methods

In order to reconstruct social classes we have used data on the employment histories from first wave of Polish GGS survey (2011). This database contains a complete reconstruction of employment histories including date of starting and ending of a given job (year and month) along with respective 3 digit ISCO-08 code. Hence, we are able to trace changes in employment and with use of this information ascribe respondents to one of three social classes. Although proposed methodology of social class construction relies on fairly simple methodology of using ISCO-08, as previous research experience shows, this seems to be a good method that produces homogenous social classes (Gdula, Sadura 2012; Domański 1985, 2009). Moreover, this methodology is deeply rooted in theoretical predictions of Bourdieu's social class theory since it is based on the assumption that occupation (type of employment) is a by-product of family background (social capital), human capital, cultural capital and economic capital. Therefore it encapsulates all the components of social class affiliation present in Bourdieu's theory. Since the list of ISCO-08 codes specific to each social class is large we just mention few in order to provide an overview on what type of employment has been ascribed to each of the three social classes:

- **Higher class:** Commissioned armed forces officers, legislators and senior officials, managing directors and chief executives, business services and administration managers, marketing and development managers, mathematicians, actuaries and statisticians, life science professionals, architects, medical doctors, university and higher education teachers, legal professionals.

- **Middle class:** production managers in agriculture, forestry and fisheries, hotel and restaurant managers, retail and wholesale trade managers, nursing and midwifery professionals, paramedical practitioners, primary and secondary education teachers, software and applications developers and analysts
- **Lower (popular) class:** cooks, hairdressers, beauticians, cashiers and ticket clerks, market gardeners and crop growers, fishery workers, crop and livestock farmers, subsistence fishers, hunters, trappers and gatherers, building frame and related trades workers, machinery mechanics and repairers.

Since GGS-PL database includes employment histories we have use the information on the duration of each employment episode and ascribe respondent to specific social class taking into account time spent in class specific occupation. This has been aimed at increasing validity of measurement. In the modelling phase we have analysed two types of outcomes:

- **“Demographic outcomes”:** fertility intentions (logit) , actual number of children (ordered logit)
- **“Normative outcomes”** measured as agreeing or disagreeing with selected statements (logit model with binary outcome): “When jobs are scarce, men should have more right to a job than women”, “A woman has to have children in order to be fulfilled”, “On the whole, men make better political leaders than women”, “Homosexual couples should have the same rights as heterosexual couples do”

Models were calculated with use of the main explanatory variables: social class (popular/lower, medium, upper) and highest level of educational of a respondent (primary: completed primary, non-completed primary, no formal education, vocational: basic vocational and gymnasium, secondary: secondary, secondary vocational, post-secondary, higher: least PhD, MA or equivalent, BA or equivalent). Additionally each model consists of following control variables: respondent’s residence at age 15, age, age squared, ever been married or in an informal union, whether respondent has changed his/her social class or educational attainment as compared to father’s level of education and social class. Moreover to find out about heterogeneity of educational attainment we have split the group of respondents with higher level of education by fraternal level of education into four groups: respondent higher education & father primary, respondent higher education & father vocational, respondent higher education & father secondary, respondent higher education & father higher. Here we may assume that respondents with higher level of education whose father also had higher education might presumably overlap with higher class.

Results

Reconstruction of social classes with use of Polish GGS data shows that this measure seems to be fairly constant over time. Independently form birth cohort (up to 1944, 1945-1964, 1965-1974, 1975+) higher-class yields from 5% to 4%, middle from 34% to 36% and lower (popular) from 65% to 61% of all respondents. In case of level of education there are significant changes especially with respect to higher level of education. For oldest cohort there are only around 13% of respondents whereas among youngest cohort this same figure yields around 31%.

In case of “demographic outcomes” inclusion of both “social class” and “level of education” into the models reveals negative gradient of educational attainment (both for parity and intentions with secondary education as a reference category). In case of social class the only statistically positive effect appears in case of popular class in the model for “parity” (with middle class as a reference category). If the “class” and “education” variables are included separately in to the models they both reveal negative gradient for both dependent variables.

For the first three “normative outcomes” the effect of social class and educational attainment overlaps with the effect for “demographic outcomes”. Negative gradient prevails and both respondents form lower class and with lower level of education are more likely to be attached to “traditional” family model. The only difference has been noticed with respect to the last value statement (equal rights for homosexual couples) where upper class has been more likely to agree about equal rights for homosexual and heterosexual couples, which was not the case for those with higher level of education. Further exploration has been based on adding variable with split of respondents with higher level of education by the level of father’s education. In case of the demographic outcomes there were no significant differences with respect to the previous formulation of the model. In case of “normative outcomes” the second formulation of the model overlaps with the first one however there are significant differences with respect to attitude towards equal rights for homosexual and heterosexual couples. Estimated parameters show that those respondents who experienced upward educational mobility (father has lower level of education than primary) have

significantly negative towards equal rights whereas those whose father also had higher education seems to overlap with higher class in their positive attitude towards equal rights for heterosexual and homosexual couples.

Discussion

Results suggest that, at least in case of demographic outcomes, there are no significant differences in predictive potential of social class as opposed to the level of education however social class seems to be a better explanatory variable in case of “normative outcomes”. This is presumably due to the fact that the both social class and education impact demographic outcomes mostly through the time shift in the individual life course. Investments in education both from higher class as well as for those pursue upward educational mobility, result in similar pattern of tempo and quantum of fertility. Results with respect to “normative outcomes” partially support our hypothesis of uni-dimensional effect of educational expansion (mostly in terms of institutionalized cultural capital). Results suggest that higher class seems to be much more open for acceptance of non-traditional gender roles as well as acceptance for equal rights for heterosexual and homosexual couples.

Future analyses should be focused on more detailed operationalization of social class (including embedded social capital) as well as on use of alternative measures of social class such as International Socio-Economic Index (Ganzeboom, de Graaf, Treiman 1992) or Standard International Occupational Prestige Scale (Treiman, 1977) along with use of measurement of other forms of capital enlisted in Bourdieu’s theory.

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