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Gender equality and preference theories in fertility intensions' explanation – the case of Poland.

Structure of the paper:

1. Introduction
2. National context
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4. Preference theory - model estimation and results
5. Social capital and gender equality theory - model estimation and results
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Abstract

The discussion on the main causes of the recent fertility decline in Europe, most detailed in the Central and Eastern Europe and in Poland in the context of the emergence of the low fertility emphasis of the influence the two groups of factors: economic and cultural . Within demographic research, this situation is primarily expressed in terms of monetary income and wealth, welfare regime and labour market changes. However, beside economic capital also social capital, gender equality both at the household and institutional level and variety of social settings based on the lifestyle preferences may be an important factor for fertility intentions and fertility-related decision making and behavior, especially in societies that face economic uncertainty like Poland.

In the study of fertility intentions in Poland, our analysis has been divided into two parts according to a theoretical framework based on social theories: part I. Preference Theory (Hakim 2000, 2003; Witali, Billari, Praskawtz, Testa 2009) and Part II. Gender Equality Theory (McDonald 2000, 2006; Bernhardt 2008; Mills, Mencarini, Tanturri, Bergall 2009) and Social Capital Theory (Bühler Fratczak, 2007 Kohler, Behrman, Jere, Watkins, 2001; Coleman, 1988, 1990; Quesnel-Vallée, Morgan , 2003; Philipov, Spéder, Billari. 2006; Lin, 2001; Schoen, Astone, Kim, Nathanson, Fields , 1999; Wellman, 1992).

Preference Theory explains changes that women have experienced in society according to fertility and employment. This social theory regards lifestyle preferences and values as principal determinants of fertility (cultural factors). Shaping public policies the heterogeneity of women's behaviours as main factor must be considered. According to this theory there are three main groups of women: home oriented adaptive and career oriented. Size of those groups vary in different countries depending of which group is favored by public policies. Different groups react in different way on policies. Career oriented women do not react on social family policies and family oriented women do not react on employment policies. Adaptive group react on both types of policies.

According to ***Gender Equality Theory*** higher educational level, higher opportunities on the labour market for working women should result in higher equality in a household. Higher equality in a household duties division should result in higher fertility. Gender equity is not only relevant within the household, but also at the institutional and national level. The level of gender development and institutional support differ between countries. The more traditional a society is with regard to the family system the greater is the level of incoherence between social institutions and fertility is lower. Even if opportunities for women (education, work) are equal to men, women will restrict the number of children because they have to include childbearing to their plans and time resources

Social Capital Theory Social capital is measured with the help of individual embeddings in networks of giving and receiving support. This influence is on the hand caused by the number of parents and relatives in these networks, but on the other hand also by the number of supportive friends and colleagues. The paper explores the impact of the availability of social capital on individual fertility intentions in Poland. In the context of the social capital theory paper wants to explore how much the availability of social capital, measured by the number of supportive relationships in an individual's personal network, has an influence on the individual's fertility intentions. This is done on the background of the significant social, economic, and demographic changes in Poland. Poland is of interest due to several reasons. Similar to other Central and Eastern Europe countries, it faced a serious decline of fertility after the breakdown of Communism.

The empirical analyses rest on data from the first wave of the panel survey "Late fertility diagnosis" survey conducted in 2007 on sample of 1200 women from two big cities in Poland. (women aged 19, 23, 27 and 31 years). In our analysis we focused on answering following questions:

1. What are fertility intentions in the city environment in Poland among the young women (coming from the selected cohorts)?
2. What are main determinants that influence fertility intentions in the city environment in Poland among young women and how the impact of the determinants may be explained in the context of the selected theories applied to the factors conditioning procreative intentions – in the context of low fertility?

Selected results:
According to *preference theory* three lifestyle preferences were measured by questions included: (i) If you could have satisfactory income without having to take paid-work, then would you still like to have a paid job or not? (ii) Who is main breadwinner/provider in your household? (iii) There is a common opinion concerning reversing of roles of a husband and wife in family. Below we present three types of family. In the ideal world where money would not pose a problem, which of the following solutions would you choose for yourself? (iv) Dou you think that you have already had realized/probably will realize in the future your preferred model? Women who preferred families where only a husband has paid work were classified as home centered (12,8%). Women who wouldn't give up their paid work even without economic necessity and who are main earnings provider in the household (or both with husband) were classified as work centered (31,8%) (different to Hakim proposal). All other women were classified to Adaptive group (55,4%).

Table 1. Preferences in family model (*preference model*) all women

	Home-centered*	Adaptive	Work-centered*
% employed	59,70%	56,00%	91,90%
% married/cohabiting	65,60%	53,01%	51,60%
single person household	7,79%	6,48%	32,46%
% 19 years old (31 year old)	20,8% (26,6%)	34,8% (19,3%)	9,16% (35,06%)
average number of children	0,57	0,38	0,31
%childless	59,74%	71,08%	76,18%
%with higher educational level	13,64%	20,48%	48,43%
intensions to have a child base=100%	56,49%	67,02%	71,73%
proportion of the three groups	12,83%	55,33%	31,84%

Results for logistic regression models are presented in following tables with two estimations: for intensions to have a first child and for intensions to have a subsequent child.

Table 3. Maximum likelihood estimates for intensions to have a first child and for intensions to have a subsequent child (*preference model*) *significant at the level <0.1

		Intensions to have:	
variable		first child	subsequent child
Intercept		0.8212*	0.7149
Work oriented		0.4560*	
Orientation	'adoptive'		-0.2476
Orientation	'home centered'		-0.8096*
Religiosity	'non-religious'	-0.7616*	-1.2901*
Religiosity	'neutral'	0.00960	-0.4941*
Age	19 (1988)	0.0681	0.5264
Age	23 (1984)	0.5703*	0.3275
Age	27 (1980)	0.0702	0.7333*
Work oriented*Social policy evaluation	'good'	-0.6356*	
Work oriented*Social policy evaluation	'satisfactory'	0.1662	
Activity	'unemployed'		1.6207*
Activity	'bierna zawodowo'		0.2560
Marital Status	'married'		1.1594*
Marital status	'cohabiting'		0.6584
Number of Children*			-1.3548*

Gender equality was measured by questions defining household division between woman and man. Actual division of duties in household was presented in the question: How do you evaluate yours and your husband's/partner's time commitment in household duties?
In logistic regression models for intensions to have a first child and for intensions to have a subsequent child two variables dedicated *gender equality theory* were included:
Gender ideals (1 means that preferred family model is a model where both partners work and take care of home and children together)
Gender reality (1 means that preparing meals is mostly done by partner or at least both partners at the same level). Preparing meals was selected as the most "kitchen" oriented household duty.
As controlling variables were additionally included: *partners educational level* and *partners activity status*.

Table 7. Maximum likelihood estimates for intensions to have a first child and for intensions to have a subsequent child (*gender equality model*)

		Intensions to have:	
variable		first child	subsequent child
Intercept		0.3886	-0.4393*
Religiosity	'non-religious'		-1.2397
Religiosity	'neutral'		-0.6351*
Age	19 (1988)	0.2017	1.0327
Age	23 (1984)	1.2977*	0.8525*
Age	27 (1980)	-0.0732	0.9522*
Activity	'unemployed'	0.3453	
Activity	'not-active'	-1.0326*	
Gender reality		0.5944*	0.5106*

For *social capital theory* two types of models were estimated. Division on intensions to have a first child and intensions to have a subsequent child was sustained.

Table 8. Maximum likelihood estimates for intensions to have a first child and for intensions to have a subsequent child (*social capital model*)

		Intensions to have:	
Parameter		First child	Subsequent child
Intercept		0.5570	-1.4822*
Dwelling	'other'	-1.4291*	
Dwelling	'rent'	0.1957	
Dwelling	'comune'	0.2172	
Activity	'unemploed'	0.1740	
Activity	'not-active'	-0.3988*	
Religiosity	'non-religious'	-0.9565*	-0.5294
Religiosity	'neutral'	-0.0468	-0.5804*
Non-material help	'no, I didn't need'	0.2904	
Non-material help	'no, I didn't know'	-0.3494	
Size of a network of talk about the advantages and disadvantages of having children		0.2144*	
… of talk about the advantages and disadvantages of living independently from other people		-0.2336*	
… of talk about using contraceptives		0.3445*	
… of support receiving dwelling (ownership)		0.5191*	
… of support receiving dwelling (without owner rights)		-0.7570*	0.6170*
… of availing of dwelling		-0.3081*	-0.9769*
… of monetary support		0.8278*	
… of non-monetary support			0.3986*
Age	19 (1988)		1.2205*
Age	23 (1984)		1.0175*
Age	27 (1980)		0.7475*
Marital status	Marraige/partners		0.8865*
Material help	'no, I didn't need'		0.5261*
Material help	'no, I didn't know'		-0.3375

Finally one model was estimated covering both types of theories gender equality and social capital.

Table 9. Maximum likelihood estimates for intensions to have a first child and for intensions to have a subsequent child (*social capital and gender equality model*)

		Intensions to have:	
Parameter		First child	Subsequent child
Intercept		0.0727	-0.6048*
Dwelling	'other'	-1.5892*	
Dwelling	'rent'	0.2382	
Dwelling	'Spółdzielcze'	0.4126	
Activity	'unemploed'	0.0708	
Activity	'bierna zawodowo'	-1.8917*	
Religiosity	'non-religious'		-0.8662
Religiosity	'neutral'		-0.9080*
Size of a network of talk about the advantages and disadvantages of having children			0.2054*
… of talk about using contraceptives		0.2847*	
… of support receiving dwelling (without owner rights)		-0.8075*	
… of availing of dwelling			-0.7466*
… of monetary support		1.2474*	
Age	19 (1988)	0.2014	1.0864*
Age	23 (1984)	1.0759*	1.0449*
Age	27 (1980)	-0.4237	0.7475*
Gender reality			0.6345*

Conclusions:

1. Quite significant group of work-oriented women in big cities in Poland
2. Much of them still plans to have a child, however not in the nearest future
3. Women receiving support from social network are more prone to have a child (the first, the second and next child)
4. Women who plan to have a child (the first, the second and next child) have also wider social network size
5. Gender equality influence in positive way fertility intentions

Generally: preference theory aims to explain and predict women's choices regarding family and paid work. Lifestyle choice mainly concerns: employment, family models and sex-role preferences. The division of lab- our in the family and the associated value system shape men and women's life course.

We focused on two types of models: for all women and for only married or cohabiting women:

In work oriented group much higher percentage of women are employed and much less are married/cohabiting. In 1/3 of cases those women were in single person household while this percentage for other groups was at the similar level 6-7%. On average work oriented women have much less children then home centered women. In this group percentage of women with higher educational level is significantly higher then in other groups. What is surprising in this group intensions to have a child is also higher. Situation in group of married or cohabiting women is similar.

We estimated logistic regression model where *intensions* to have a child was a dependent variable and *orientation* as explanatory one.

Orientation was significant and confirmed descriptive findings. From other controlling variables *economic activity*, *religiosity*, *age* and *child* were significant. Having a child make a woman less prone to have a subsequent child.

In social capital model for fertility intensions we were testing (hypothesis 1) that: **Social capital is a factor which influences the fertility intention in a positive way and partly reduces uncertainty and tension resulting from reconciliation of work and family life.** We estimated two models: one for intensions to have a firs child and the second for intensions to have a subsequent child.

In the firs model following variables were significant: size of a network of talk about advantages and disadvantages of having a child (positive effect), size of a network of talk about advantages and disadvantages of staying in relationship with another person (negative effect), size of a network of talk about

using contraceptives (positive effect), size of a network of talk about monetary support (positive effect), and controlling variables: activity, dwelling conditions, religiosity.
In the second model following variables were significant: size of a network of talk about availing of dwelling (positive effect), size of a network of talk about non-monetary support (positive effect), regular material support (positive effect), and controlling variables: age, religiosity, marital status.
The role of gender equality can be operated on both micro and macro levels. Macro level is connected with (in)adequate development of institutions. Micro level is connected with the division of household and family tasks between men and women.
In gender equality model for fertility intensions we were testing hypothesis (hypothesis H.2) that: **Higher gender equality, the stronger positive influence on the fertility intentions** We estimated two models: one for intensions to have a firs child and the second for intensions to have a subsequent child. Following variables supported intensions to have a child in first model: gender reality, age, economic activity; and following supported intensions to have the second and subsequent child: gender reality, religiosity, age.
Generally all hypotheses concerning the three groups of theories related to the fertility intentions in Poland (divided to the fertility intentions to have a first child and to have a second child) have been verified in positive way.

Selected literature

Bernhardt E., Noack T., Lyngstad T.H., (2008) "Shared housework in Norway and Sweden: advancing the gender revolution" Journal of European Social Policy Vol 18(3).
Bühler C. and E. Fratczak (2007): "Learning from others and receiving support: the impact of personal networks on fertility intentions in Poland" European Societies, 9 (3): 359 – 382.
Coleman, J.S. (1990): *Foundations of Social Theory*. Cambridge, Massaschusetts: The Belknap Press of Harvard University Press.
Crompton, R. and F. Harris (1998). ―Explaining Women's Employment Patterns: Orientations to Work' Revisited, *British Journal of Sociology*, 49(1): 118-36.
Esping-Andersen, G., Gallie, D., Hemerijk, A. and J. Myles (2002). ―*Why We Need a New Welfare State*, Oxford: Oxford University Press.
Esping-Andersen, G. (1990). ―*The Three Worlds of Welfare Capitalism*, Cambridge: Polity Press.
Hakim, C. (2003a). ―*Models of the Family in Modern Societies: Ideals and Realities*, Aldershot: Ashgate.
Hakim, C. (2003b). ―A New Approach to Explaining Fertility Patterns: Preference Theory, *Population and Development Review*, 29(3): 349-374.
Hakim, C. (2000). ―*Work-Lifestyle Choices in the 21st Century: Preference Theory*, Oxford: Oxford University Press.
Hakim, C. (2002). ―Lifestyle Preferences as Determinants of Women's Differentiated Labour Market Careers, *Work and Occupations*, 29(4): 428-459.
Hakim, C. (2003): **"**A new approach to explaining fertility patterns: preference theory,"*Population and development review*, 29 (3): 349-374.
Kohler, H. P., Billari, F. C. and J. A. Ortega(2002). ―The Emergence of Lowest-Low Fertility in Europe During the 1990s, *Population and Development Review*, 28(4): 641-681.
Lesthaeghe, R. and J. Surkyn (1988). ―Cultural and Economic Theories of Fertility Change; *Population and Development Review*, 13(1): 1-45.
Lesthaeghe, R. (1983). ―A Century of Demographic and Cultural Change in Western Europe: An Exploration of Underlying Dimensions, *Population and Development Review*, 9(3): 411-435.
McDonald, P. (2002). ―Sustaining Fertility Through Public Policy: The Range of Options, *Population*, 57(3): 417-446.
McDonald, P. (2000): "Gender Equity, Social Institutions and the Future of Fertility," *Journal of Population Research*, 17 (1): 1-16.
Mills, M., L. Mencarini, M.L. Tanturri and K. Begall (2008). "Gender equity and fertility intentions in Italy and the Netherlands," Demographic Research, 18 (1): 1-26.
Miller, W. B. and D. J. Pasta(1995). ―Behavioural Intentions: Which Ones Predict Fertility Behaviour in Married Couples?, *Journal of Applied Social Psychology*, 25: 530-555.
Reher, D.S. (1998). ―Family Ties in Western Europe: Persistent Contrasts, *Population and Development Review*, 24(2): 203-234.
Surkyn, J. and R. Lesthaeghe (2004). ―Value Orientations and the Second Demographic Transition (SDT) in Northern, Western and Southern Europe: An Update, *Demographic Research*. Special Collection 3, Article 3. Online available at: http://www.demographic-research.org/.
Testa, M. R. and L. Grilli (2006). ―The Influence of Childbearing Regional Contexts on Ideal Family Size in Europe, *Population*, 61(1-2): 109-138.
Van de Kaa, D. J. (1987). ―Europe's Second Demographic Transition, *Population Bulletin*, 42(1): 1-57.
Vitali, A., Billari, F.C., Prskawtz, A. and M.R. Testa (2009): "Preference theory and low fertility: A comparative perspective" *European Journal of Population*, 25: 413-438.