

# **Gender Inequality and Power in Universities (results of studies)**

by

**Renata Siemienka**

University of Warsaw, Warsaw, Poland

Email: [siemiens@post.pl](mailto:siemiens@post.pl)

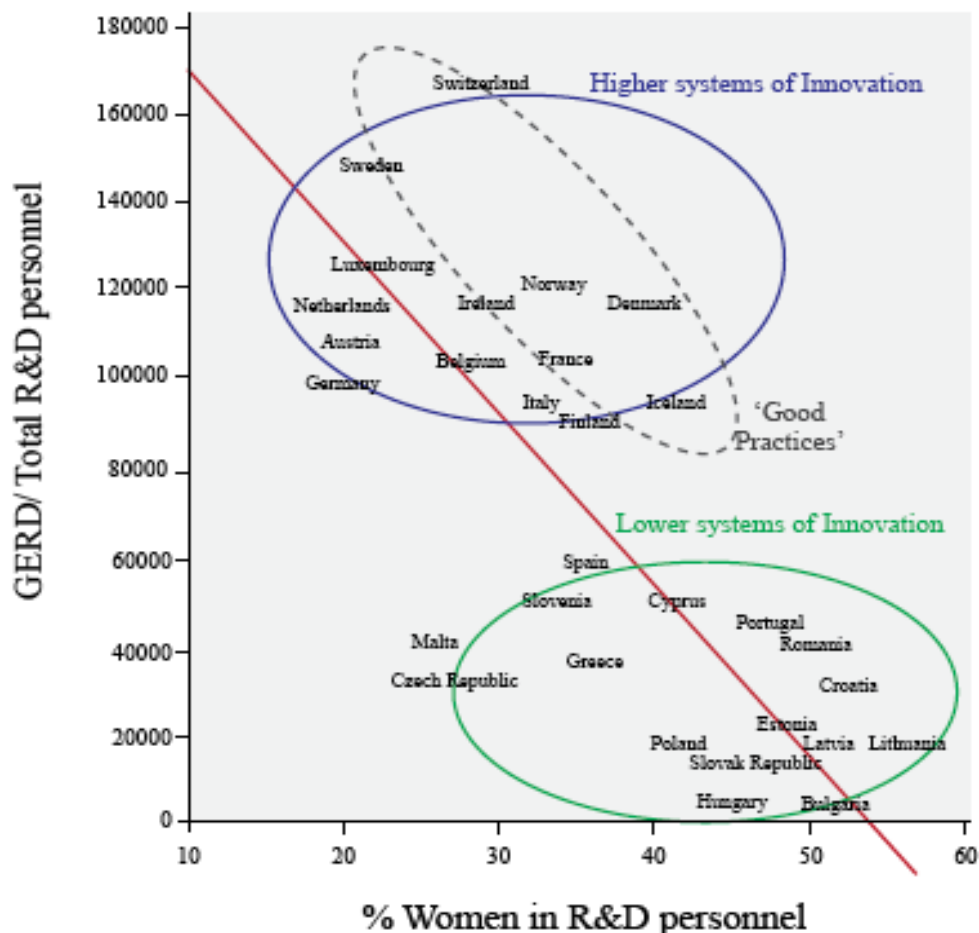
## **HYPOTHESES:**

- **An increase** of number of women in scientific institutions **cannot serve** as a simple proof of **the diminishing level of women's discrimination**
- **The decrease of funds** for education, research, wages of scientists result in a slowdown of academic careers, measured by time intervals between earning subsequent university degrees and scientific productivity.
- **Different causes and consequences determine gendered trajectories in academia** (e.g. different patterns of hiring, determinants of research productivity and access to power structures).

## **CHANGES IN STRUCTURE OF ACADEMIC STAFF**

- (1) The increasing proportion of women among students in the last 30 years does not cause the same proportion of women employed in academia (She Figures 2003, She Figures 2006, She Figures 2012).**
- (2) The worsening situation in the sector of science results in a **decrease** of the number of men and an increase in the number of women, making the latter „**winners among losers**” (Siemieńska 2000; 2001, 2008).**
- (3) **External (migration abroad) and internal (within domestic labor market) brain drain in higher education sector and its consequences.****
- (4) “Unbreakable glass ceiling” for women in decision making bodies in science**

**Figure 3: Percentage of women in total R&D Personnel relative to the amount of Gross domestic expenditure on R&D (GERD) spent per R&D personnel (in euro), in 2004.**



SE, LU, NL, DE, BE, NO, EL, DK, IS, PT: 2003; LT, LV, SK, SI, CZ, MT: 2005.

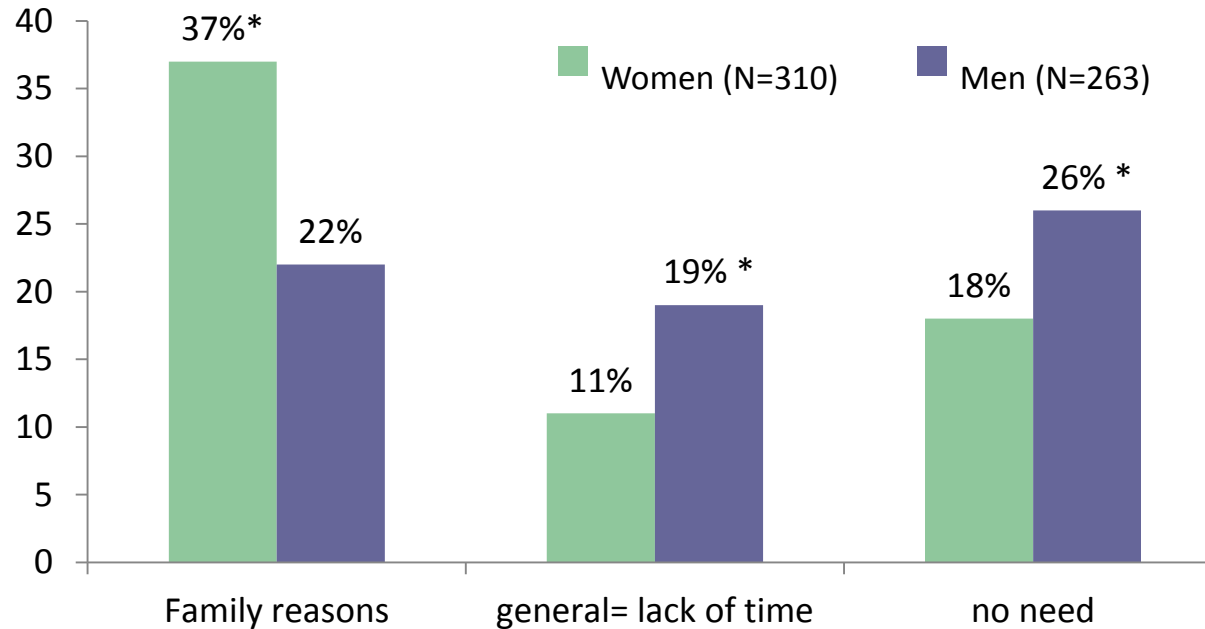
Percentages of women in R&D personnel are in Full Time Equivalents except: HG, PL, FI, NO, FR, CH, NL and LU which are in Head Counts.

Source: compiled from Eurostat R&D personnel and Gross domestic expenditure on R&D data.

## **MECHANISMS HAMPERING PRESENCE OF WOMEN IN ACADEMIA IN RECRUITMENT – MENTORING - PROMOTION**

- **Stereotypes shaping candidates' aspirations and conceptions of life careers**
- **Private life of scientists: partnering patterns, careers of academic couples**
- **Difficulties in reconciliation of work and private life**
- **Women's absence in decision-making bodies in science**

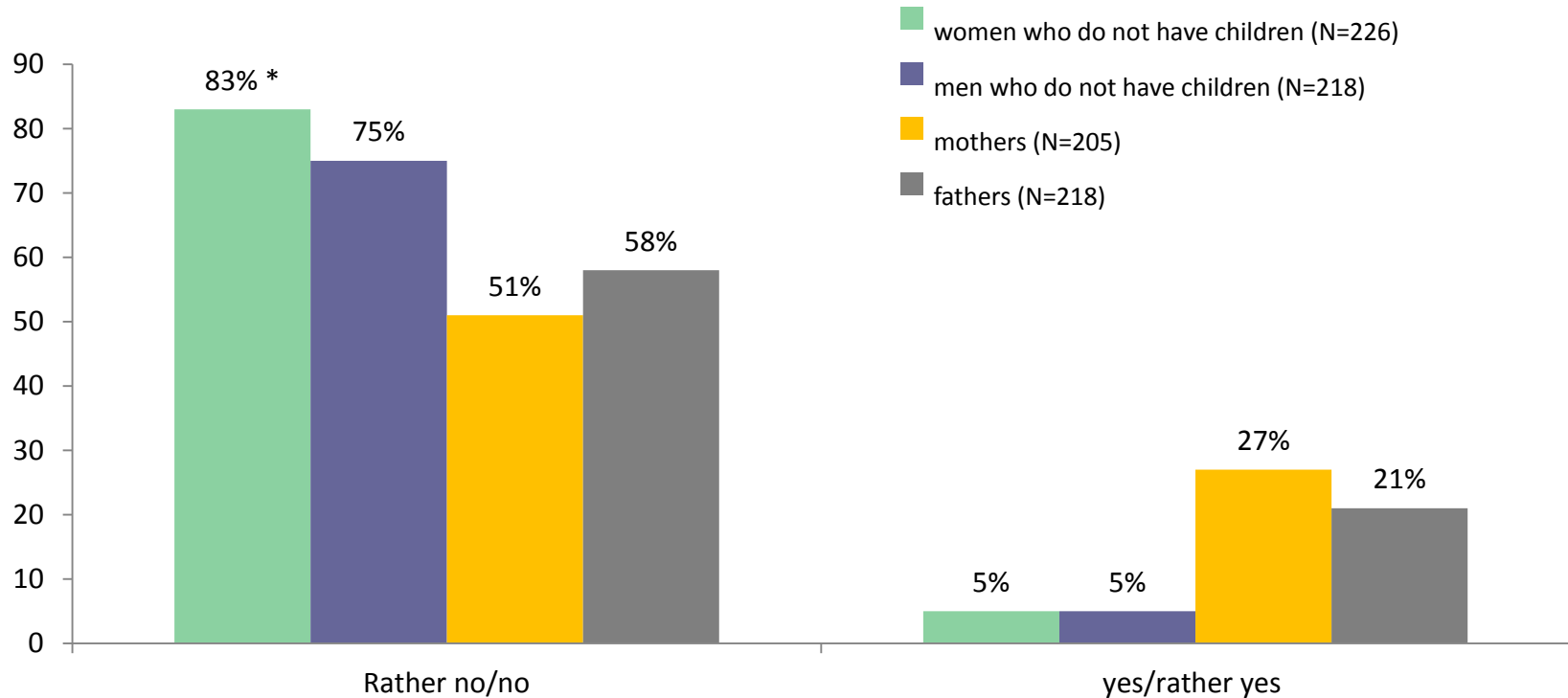
## Reasons for not applying for stipends /grants



\*significant differences (on level .05)

Source: „Kariery młodych naukowców” (Careers of Young Scientists) N=871, May-July 2005, face to face interviews

# “Family obligations are obstacles in professional work” (% of respondents who agree and disagree)



\*significant differences (on level .05)

Source: „Kariery młodych naukowców” (Careers of Young Scientists) N=871, May-July 2005, face to face interviews

## **WOMEN IN LEADERSHIP POSITION IN SCIENCE : POLISH CASE**

**Women are almost absent on the top administration positions in the best higher education institutions.**

**Table Women as decision makers in higher education institutions (% of total in each category in the institutions) in 2012**

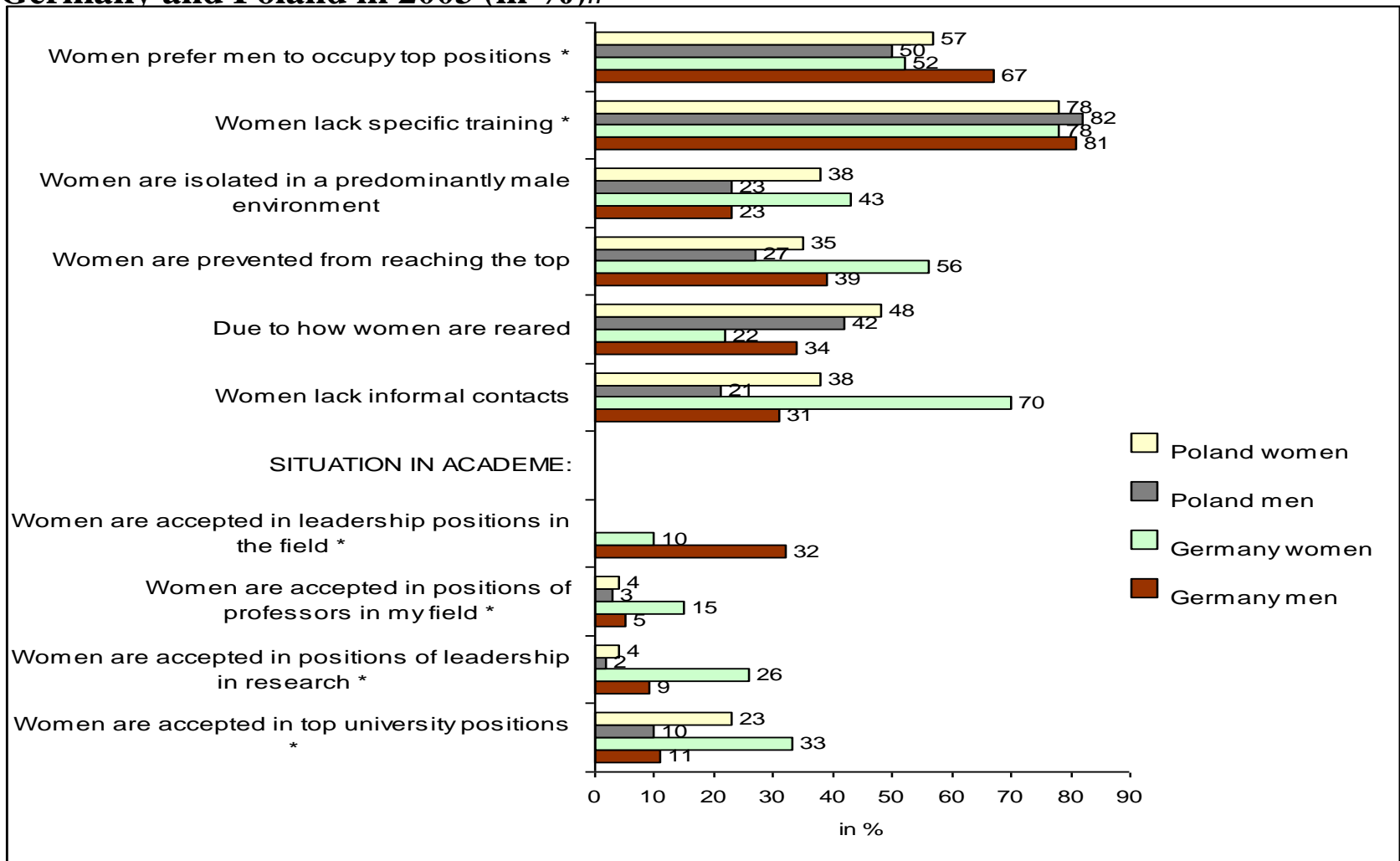
<b>Higher education institutions:</b>	<b>Presidents N=10</b>	<b>Vice - presidents N=42</b>	<b>Deans N=117</b>	<b>Vice - deans N=365</b>
<b>1-10 positions in the national ranking</b>	<b>10.0</b>	<b>9.5</b>	<b>15.4</b>	<b>26.6</b>
<b>Higher education institutions</b>	<b>Presidents N=10</b>	<b>Vice - presidents N= 21</b>	<b>Deans N= 37</b>	<b>Vice - deans N= 60</b>
<b>80-90 positions in the national ranking</b>	<b>10.0</b>	<b>38.1</b>	<b>18.9</b>	<b>40.0</b>

**Author's calculations**



# AWARENESS OF DISCRIMINATION : GERMAN AND POLISH CASES

**Fig.: Perception of gender inequality in public sphere and academe by full professors in Germany and Poland in 2003 (in %)# ^**

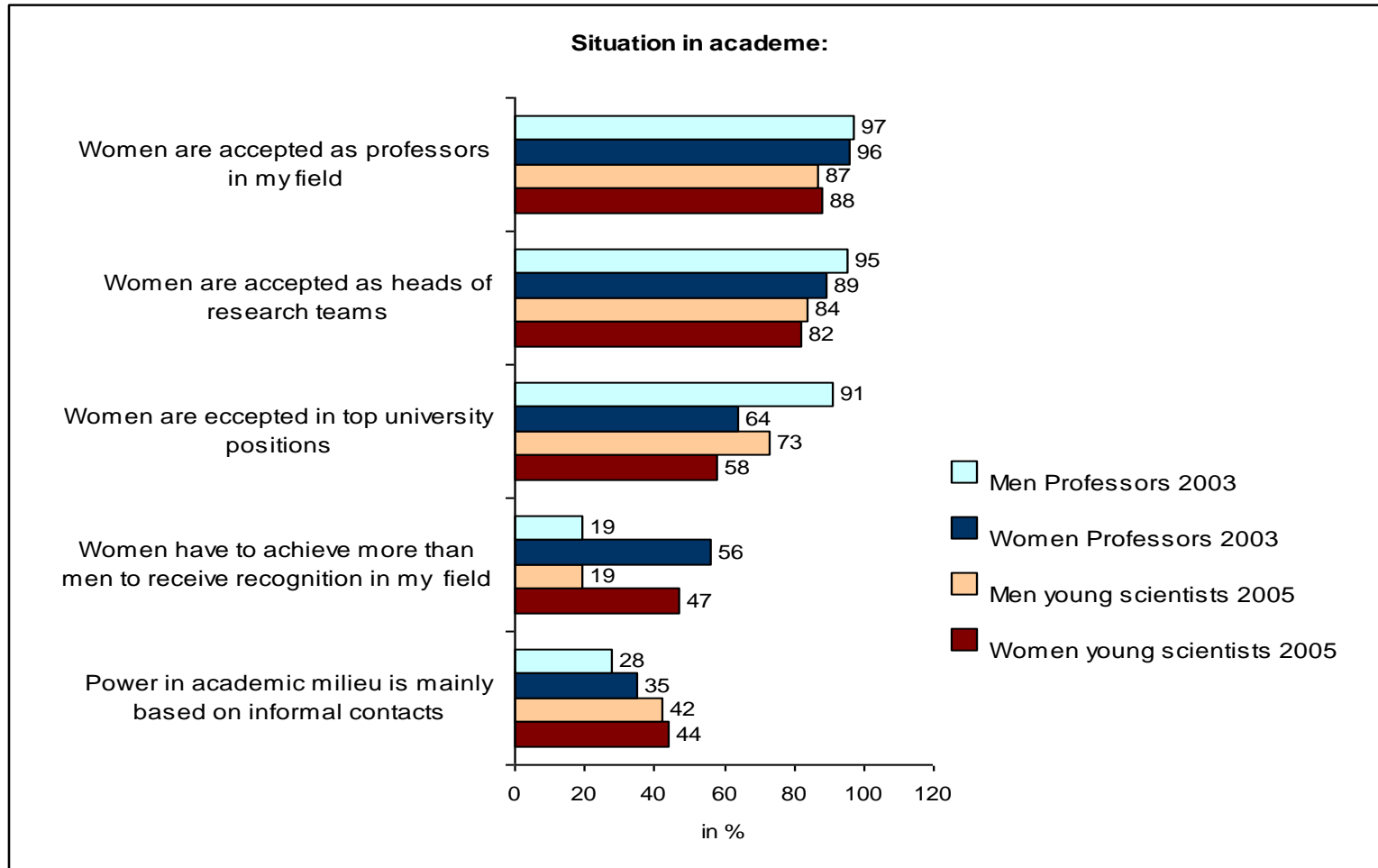


#Answers : „strongly agree „and „agree“ or \* „strongly disagree „and „disagree“ depends on the question.

^ Study on full professors conducted in 2003 in the project of EC “Women in European Universities”

# AWARENESS OF DISCRIMINATION IN TWO GENERATIONS: POLISH CASE

**Fig. : Perception of gender inequality in public sphere and academe by “Full professors” 2003 and “Young scientists” (30-40 y old) 2005” (in %)**



#Answers : „strongly agree „and „agree“ or \* „strongly disagree „and „disagree“ depends on the question.

^ Study on full professors conducted in 2003, on young scientists in 2005

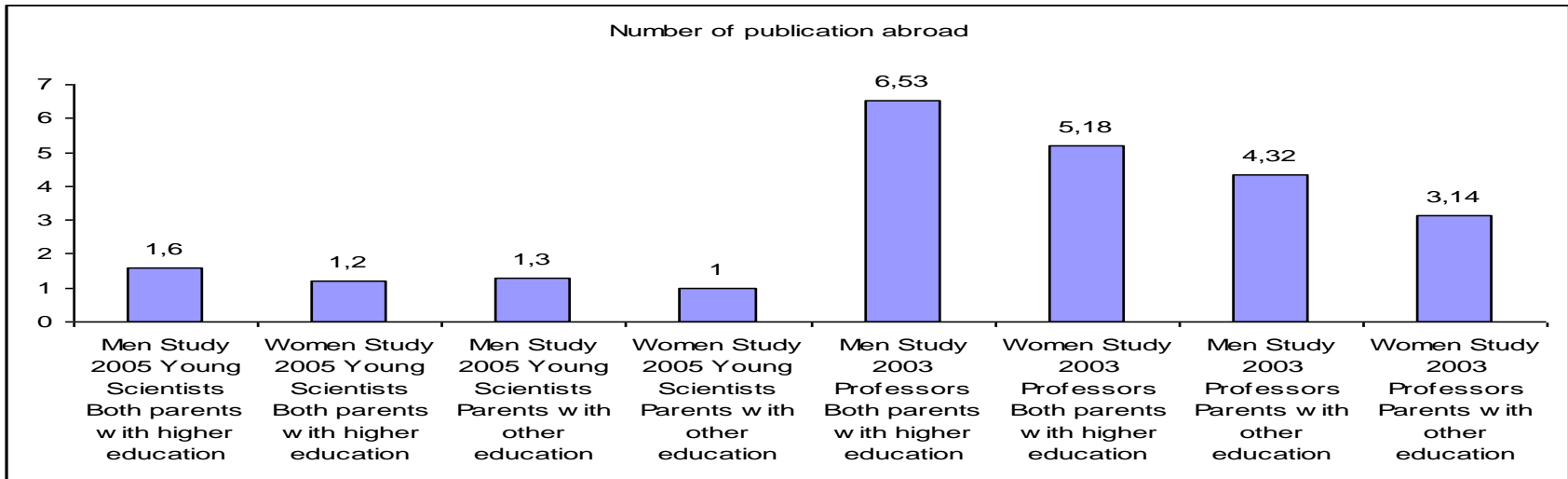
## •“Cultural capital” and research productivity

Table : „Cultural capital” of scientists and their research productivity (number of publications in the last two years) (means)

	Study 2005		Study 2005		Study 2003		Study 2003	
	Young scientists		Young Scientists		Professors		Professors	
	Both parents with higher education		Parents with other education		Both parents with higher education		Parents with other education	
	Men N=130	Women N=106	Men N=310	Women N=431	Men N=60	Women N=66	Men (N=357)	Women N=401
Number of publication in Poland	9.3 (8.9)	9.0 (10.7)	8.0 (8.0)	8.3 (10.0)	10.8 (11.4)	13.8 (17.4)	11.4 (14.3)	12.4 (20.7)
Number of publication abroad	1.6 (3.1)	1.2 (2.7)	1.3 (2.8)	1.0 (2.4)	6.53 (7.62)	5.18 (8.01)	4.32 (7.4)	3.14 (4.55)
Number of publication in Poland and abroad –total	10.9 (10.1)	10.2 (11.8)	9.3 (9.1)	9.3 (10.6)	17.4 (13.0)	19.0 (21.2)	15.8 (17.3)	15.6 (20.9)

In brackets: standard deviations

Figure : „Cultural capital” of scientists and their research productivity (number of publications abroad in the last two years) (means)



## • Socio-demographic determinants of research productivity.

Figure : Research Productivity of Full Professors according to age and gender (means of total number of publications) (study 2003)

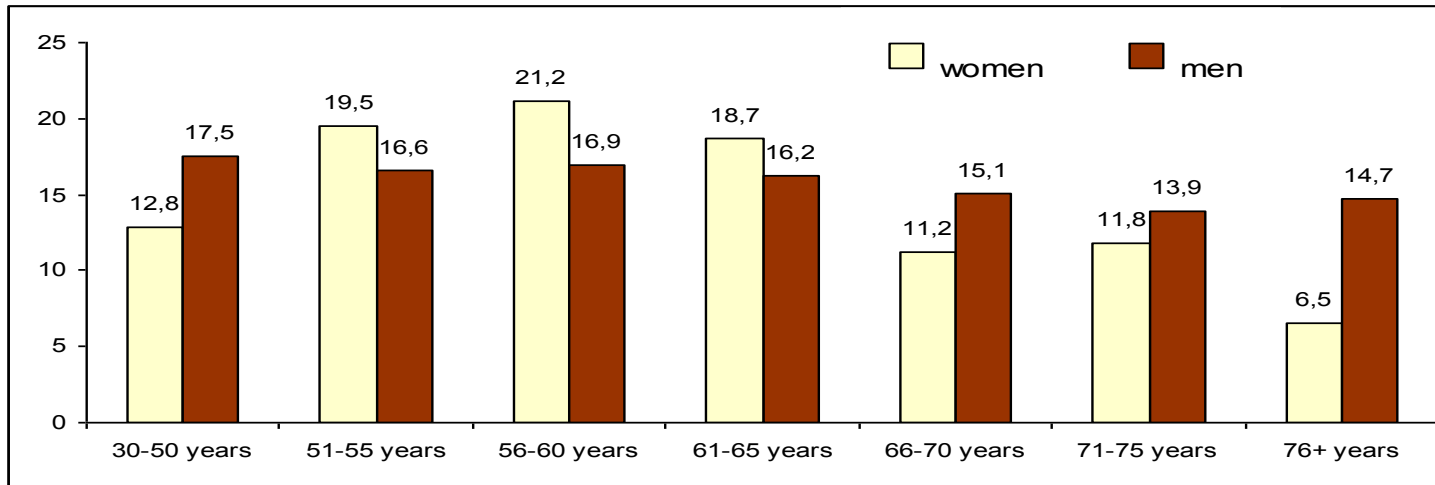
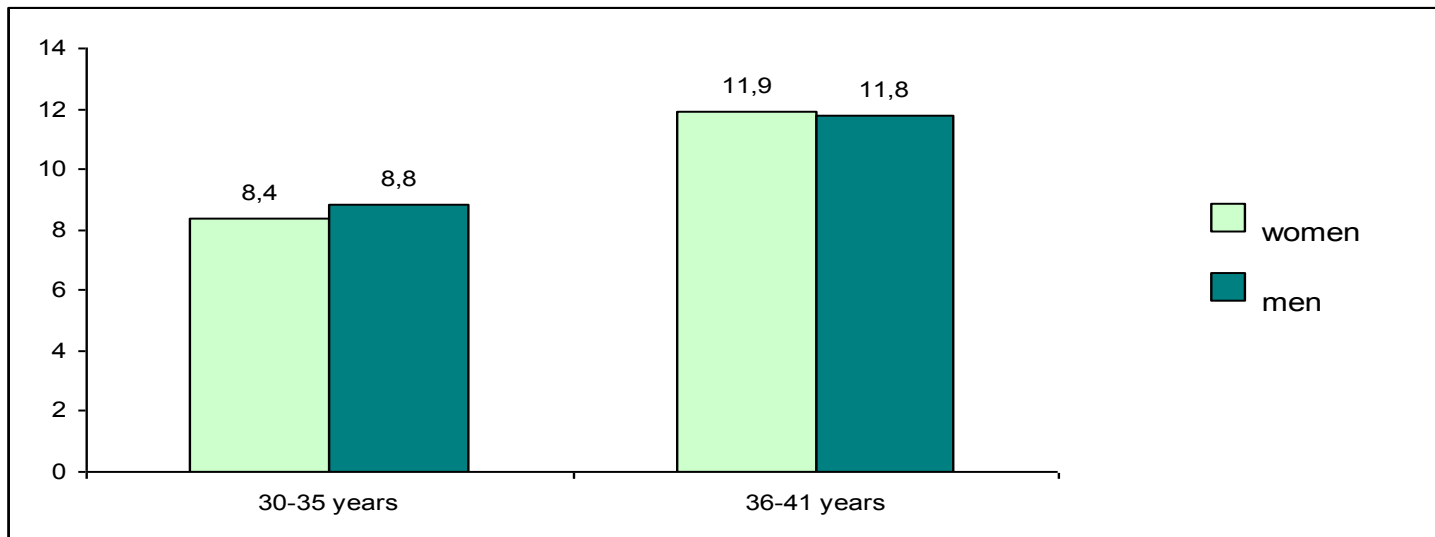
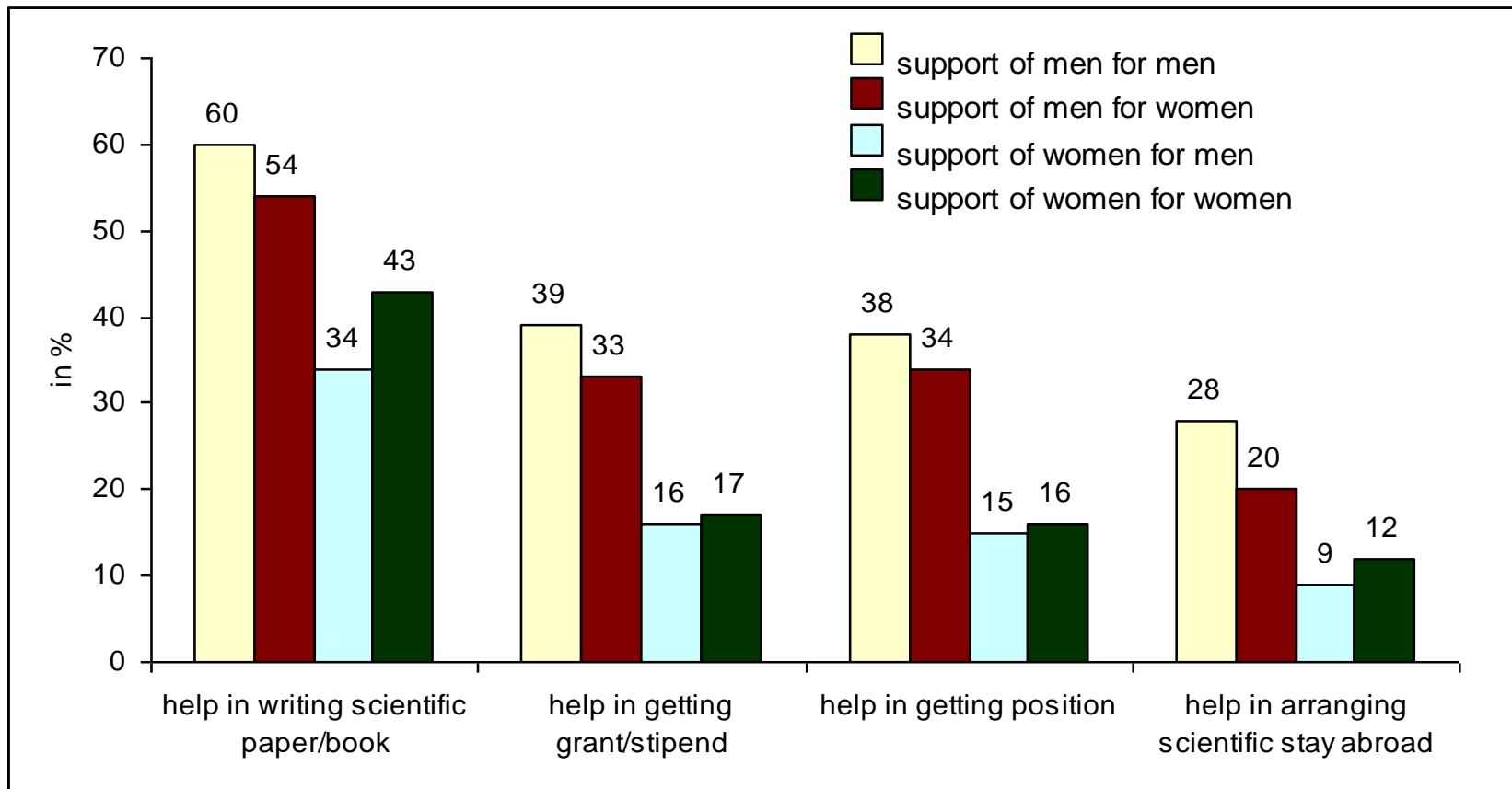


Figure : Research Productivity of Young Scientists (30-41 years old) according to age and gender (means of total number of publications) (study 2005)



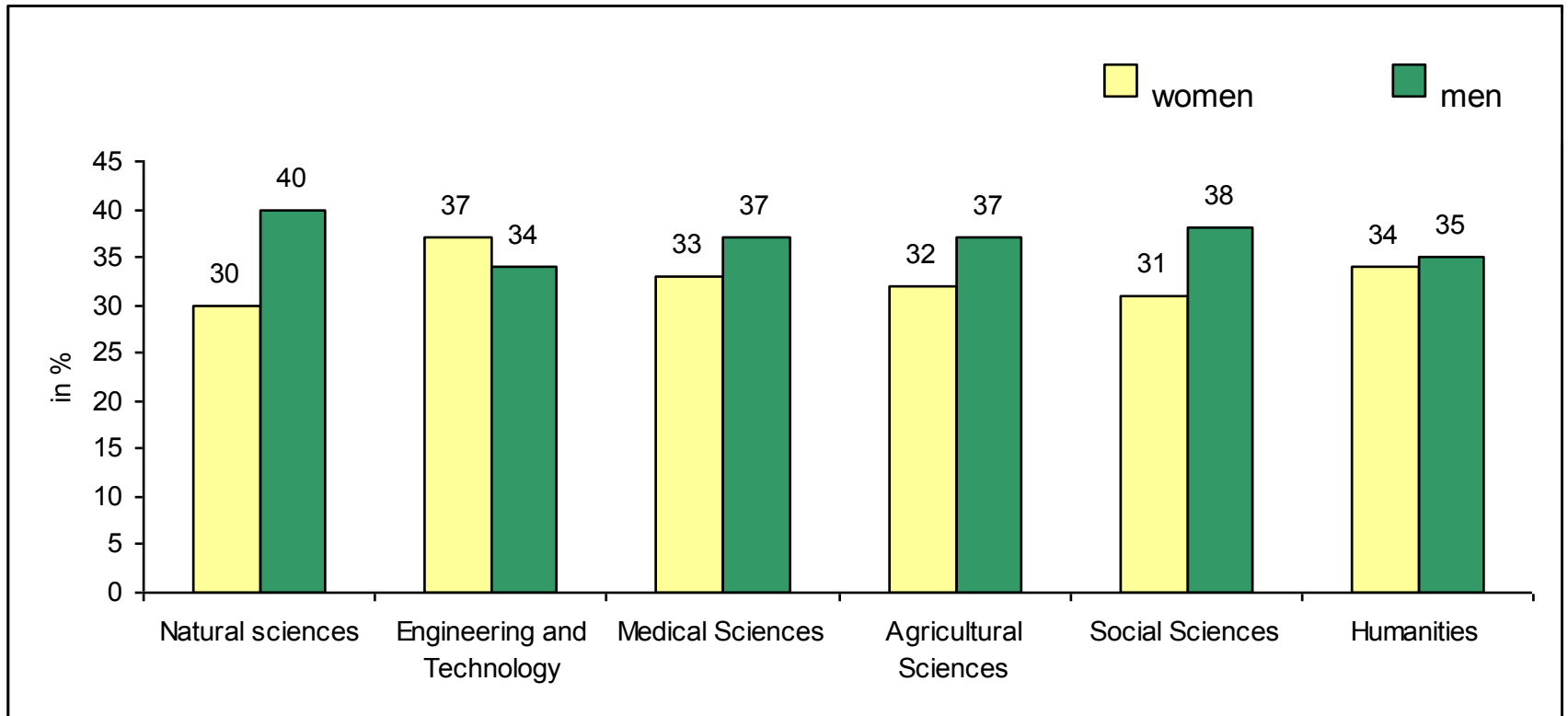
- **Support in academic environment**

**Figure : Support at Academic Environment of Men and Women (being supervisors, colleagues, collaborators) among young scientists (% of those who received) (study 2005)**



## GENDER SUCCESS RATE IN POLAND

**Fig.: Gender and success rate in receiving research grants from the Ministry of Science and Higher Education in 2007.**



Success rate: Percentage of received grants to submitted applications.

Source: author's calculations.

## **CONCLUSIONS AND RECOMMENDATIONS**

- **Women less often applied for grants in general and even in the disciplines where they constitute a large part of employees.**
- **The fact can be due to the lower positions which they occupy.**
- **However, it is possible to argue that enough large group of women with doctoral degree is working in research, development and institutions of higher education to submit more applications.**
- **We might assume (what we know also from some studies) that women face structural barriers in their academic institutions and also non academic restrains (conflict between work and family etc.).**
- **Women's situation as grant and stipends receivers is slowly changing. Recently they are more often present among beneficiaries.**
- **It is necessary to remember that there is almost no institution using quota for women grant receivers or criterion of gender to equalize or to favor women.**

## **RECOMMENDATIONS (cont.)**

### **Changes on macro – level :**

- **The high percentage of women among graduates at universities requires consideration of needs of local, national and European labor markets, development of educational and research sectors.**
- **To influence women's and men's choices of fields of studies to make women more interested in technical studies and hard sciences because of lack of specialists in the fields at universities and research institutions in other European Union countries.**



## **RECOMMENDATIONS**

### **Creation of mechanisms facilitating women's presence and success in academy:**

- **Implementation of policy in academy including:**
- **systematic monitoring criteria of promotion of men and women by special units in scientific institutions;**
- **attempting creation of gender balanced structures of different scientific bodies**

## **Regulations directly addressed to women:**

- **longer period for applying for grants and stipends for female scientists who have small children (e.g. actually, the period is extended one year for women who have babies),**
- **special grants helping women to update their knowledge and research after after maternal/parent leave)**
- **women with small babies participating in workshops, conferences etc. should have right to get support of the employing institutions to cover the expenses of additional person who will take care on the child during the events.**
- **extended period for evaluation of scientific accomplishments of mothers/fathers with small children;**

## **RECOMMENDATIONS (cont.)**

### **Policy addressed to families of young scientists:**

- **Young fathers and mothers should have opportunities to place children in facilities (day care centers) organized by scientific institutions or to get from them financial support to place them in other facilities of this kind.**

**The above list includes main institutional mechanisms which should be developed. In reality the list should be modified and adjusted to specific conditions of countries.**

## **Sources:**

**R.Siemieńska coauthor:**

**EC project :Women in European Universities 2001-2003**

**EC project (experts' report) : Gender and Excellence (allocation of grants by national institutions) 2008**

**PHARE project „Young scientists” 2005 (Polish case)**

**Gender and Equality in Universities 2013-2016 (Polish –Noewegian project)**

## **Selected publications in English:**

**R.Siemieńska:**

**Book:**

**Siemieńska, R., A. Zimmer (eds.)(2007) *Gendered Trajectories in Academia in Cross-National Perspective*. Warsaw: Scholar (distribution also: Budrich Verlag);**

**Chapters:**

**- 2006, Polish Universities as a Place of Study and Academic Careers: Class and Gender Consideration. In: Allen, W.R. et al. (eds.) *Higher Education in a Global Society: Achieving Diversity, Equity and Excellence*. Amsterdam - Boston - Oxford -Paris – Sydney – Tokio: Elsevier . 51-90.**

## **Selected publications in English: (cont.)**

- **2008, Research Productivity in Polish Universities and Its Determinants at the Beginning of the 21st Century. W: U. Teichler, H. Vessuri (eds.) *Universities as Centers of Research and Knowledge Creation: An Endangered Species?*. Rotterdam/Taipei:. Sense Publishers. s. 161-178**
- **2009, Poland. (in) *The Gender Challenge in Research Funding. Assessing the European National Scenes*. Brussels: European Commission Report. Directorate L Science, economy and society .Scientific Culture and Gender Issues**
- **2012 ( with D. Walczak) Polish Higher Education: From State Toward Market, From Elite To Mass Education in: W.Allen (ed.) *As the World Turns: Implications of Global Shifts in Higher Education for Theory, Research and Practice*. 2012 by Emerald Group Publishing Limited**