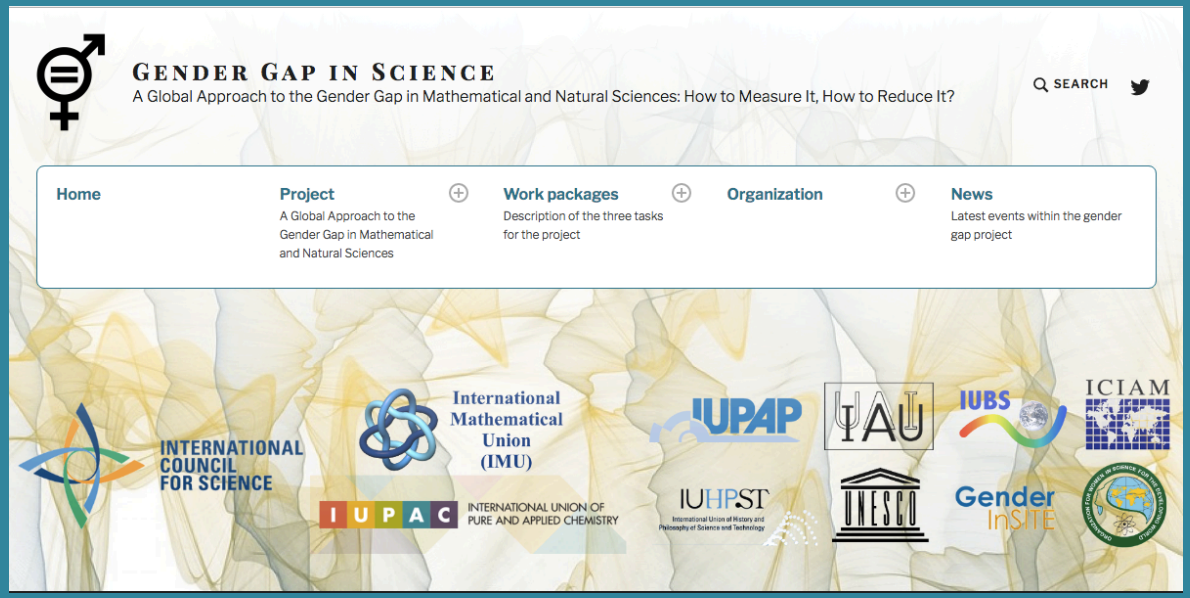
The Gender Gap in Science Project

Silvina Ponce Dawson
Departamento de Física, FCEN-UBA and IFIBA (CONICET)

Executive Committee Meeting, October 2019



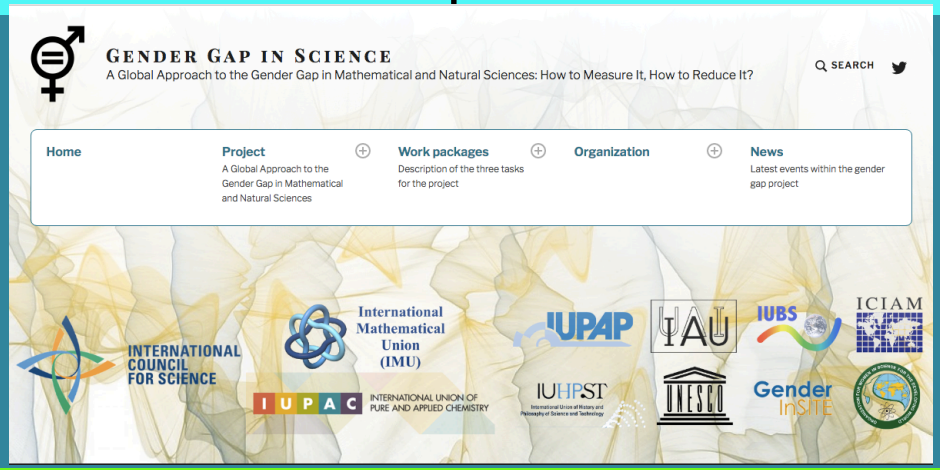
A brief reminder

A Global Approach to the Gender Gap in Mathematics, Natural and Computational Sciences: How to Measure It, How to Reduce It?"

Three tasks:

- A global survey including all natural sciences and math (AIP again in charge of it).
- Study of patterns of publication (detailed analysis of metadata)
- Compilation and elaboration of lists of good practices (considering regional differences)

Received a large grant from ICSU (now ISC) that finishes in 2019. IUPAP and other unions provide additional support.



https://gender-gap-in-science.org/

Gender Gap in Science Project

Global Survey: remained open until December 31st, 2018 and collected about 34,000 responses from all over the world. Physicists who responded: 7570 (female: 2777, male: 4793).

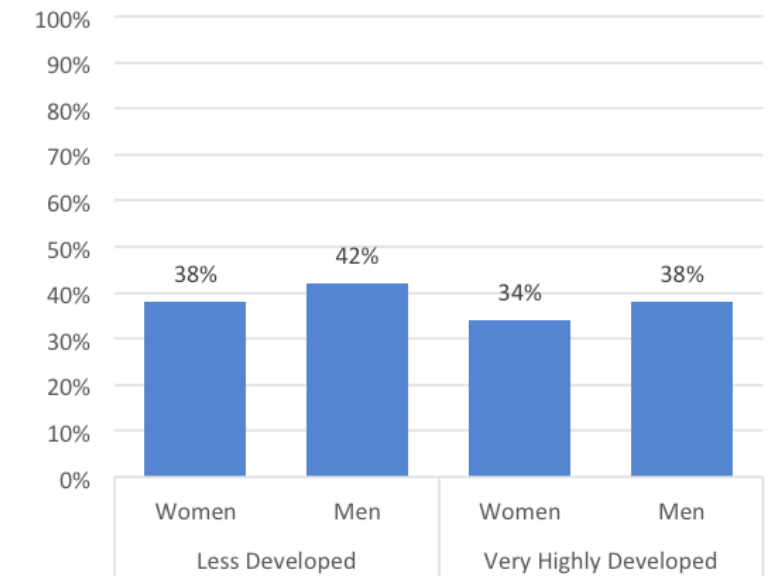
Analysis has been done by AIP Statistical Research Center. I show you some results (they will officially be presented at the closing activity in November). They will be included in the final report that will be available for consultation at the project website.

Comparison of data from the 2010 Global Survey of Physicists and the 2018 Global Survey on Scientists.

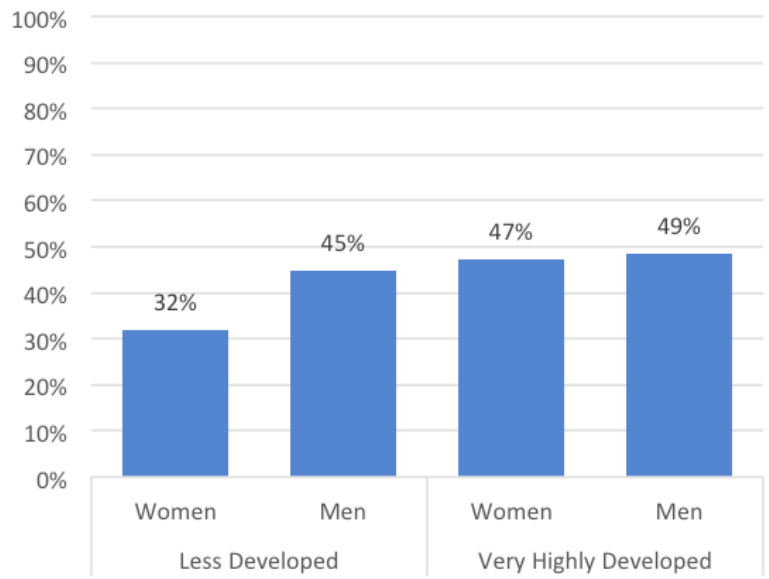
Have you participated in the following? (in %)								
	2010				2018			
	LD		HD		LD		HD	
	F	M	F	M	F	M	F	M
Given a talk at a conference as an invited speaker	51	67	58	73	64	71	68	74
Attended a conference abroad	75	81	83	87	85	86	79	79
Conducted research abroad	54	71	61	69	64	69	59	70
Acted as a boss or manager	38	53	46	61	48	56	41	49
Served as editor of a journal	16	24	11	19	16	19	22	28
Served on committees for grant agencies	22	37	26	36	28	33	21	30
Served on important committees at your institute or company	50	62	48	60	47	53	48	57
Served on an organizing committee for a conference in your field	48	59	48	55	52	52	55	69
Advised or supervised undergraduate students	82	84	69	74	79	84	82	84
Advised or supervised graduate students	63	77	58	70	64	70	68	77
Served on thesis or dissertation committees	52	66	37	52	40	46	64	70

Respondents Indicating No Difficulty Finding Positions or Professional Opportunities

Global Survey of Physicists (2010)

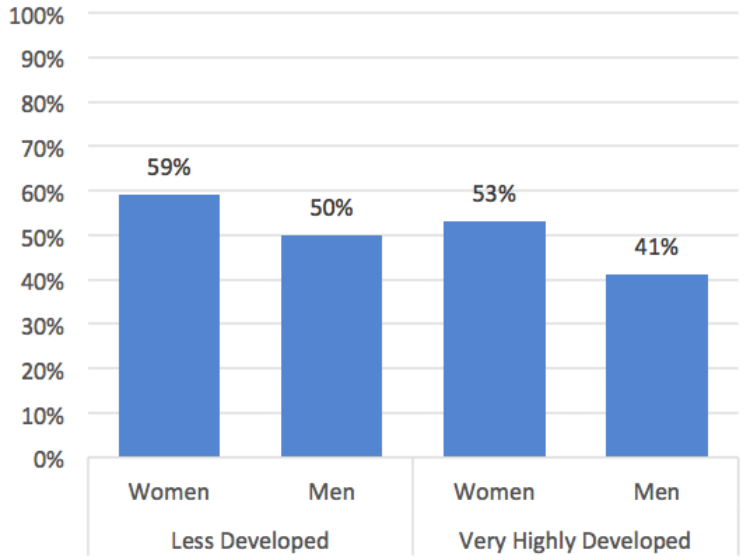


Global Survey of Scientists (2016)

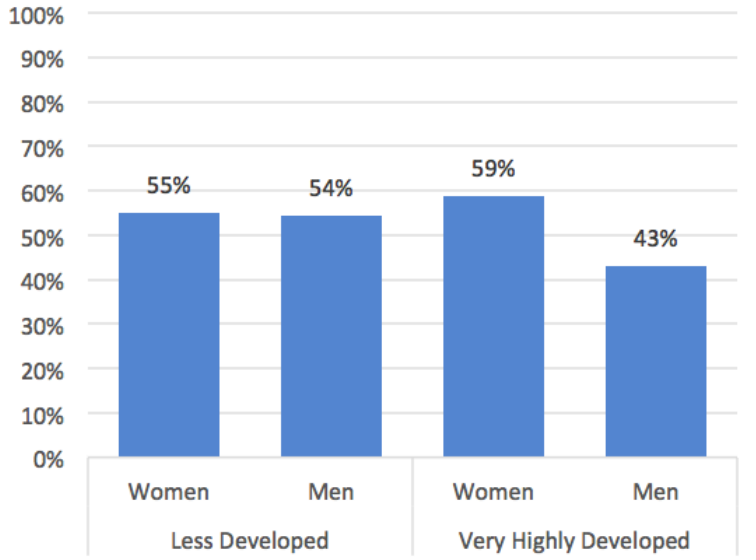


Has your career influenced your decisions about children, marriage, or a similar long-term partnership?

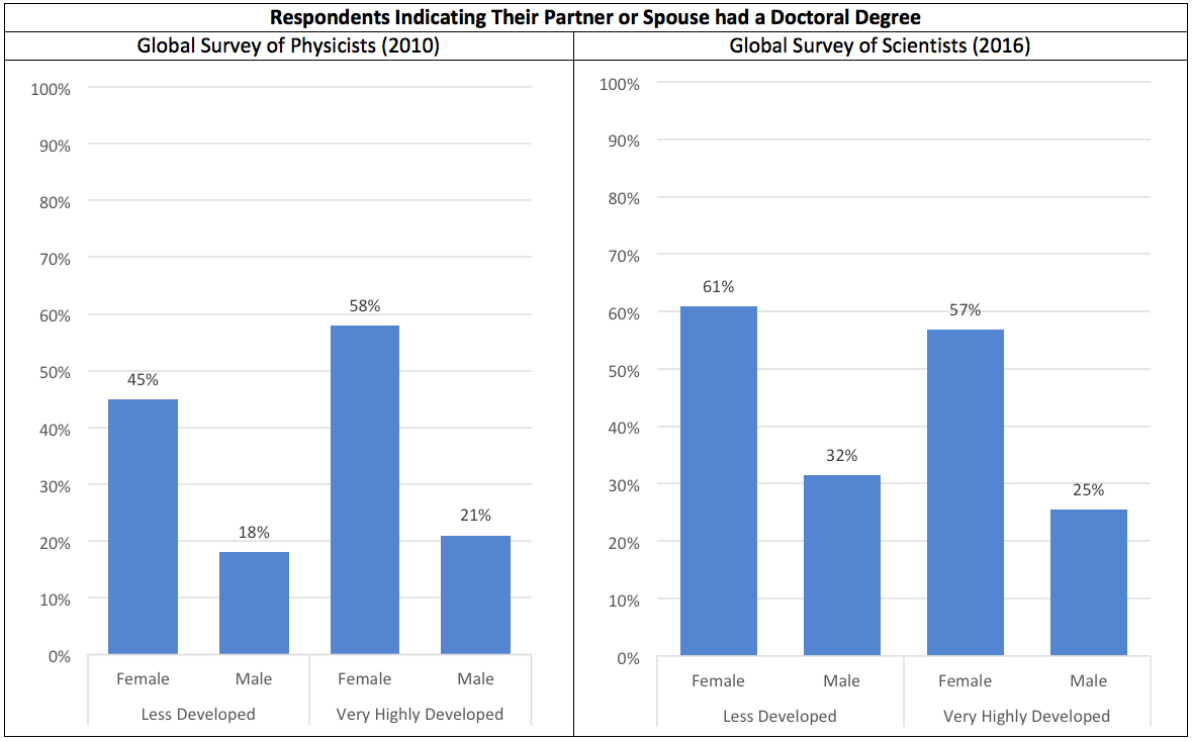
Global Survey of Physicists (2010)



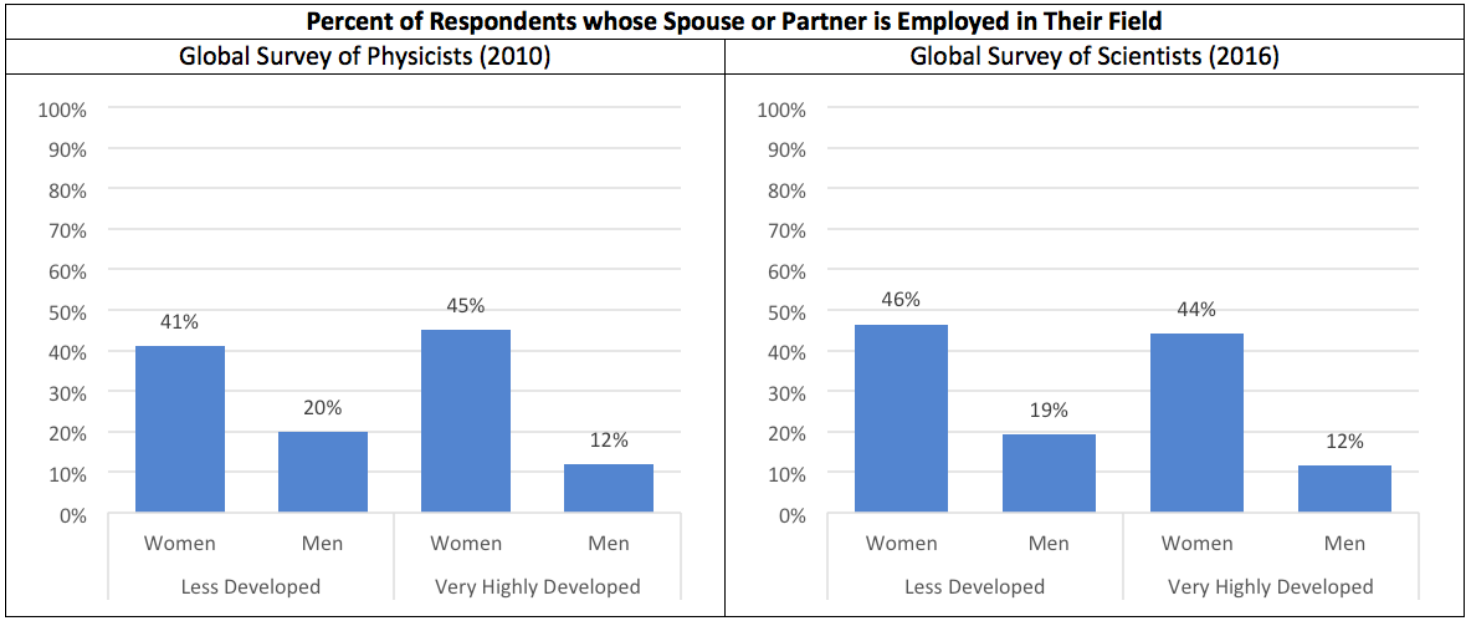
Global Survey of Scientists (2016)



Respondents Indicating Their Partner or Spouse had a Doctoral Degree



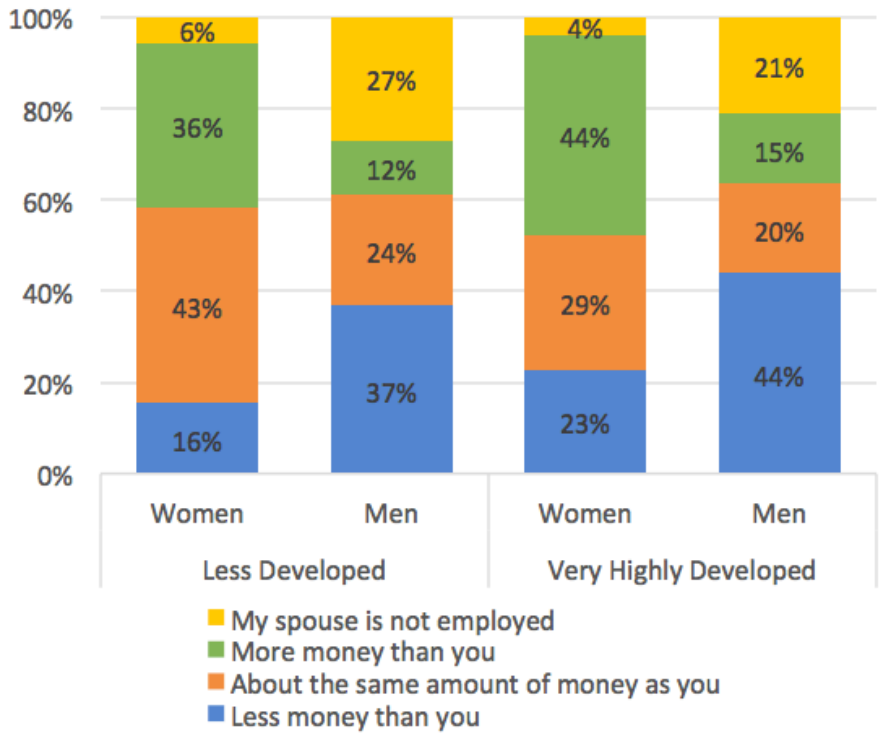
Percent of Respondents whose Spouse or Partner is Employed in Their Field



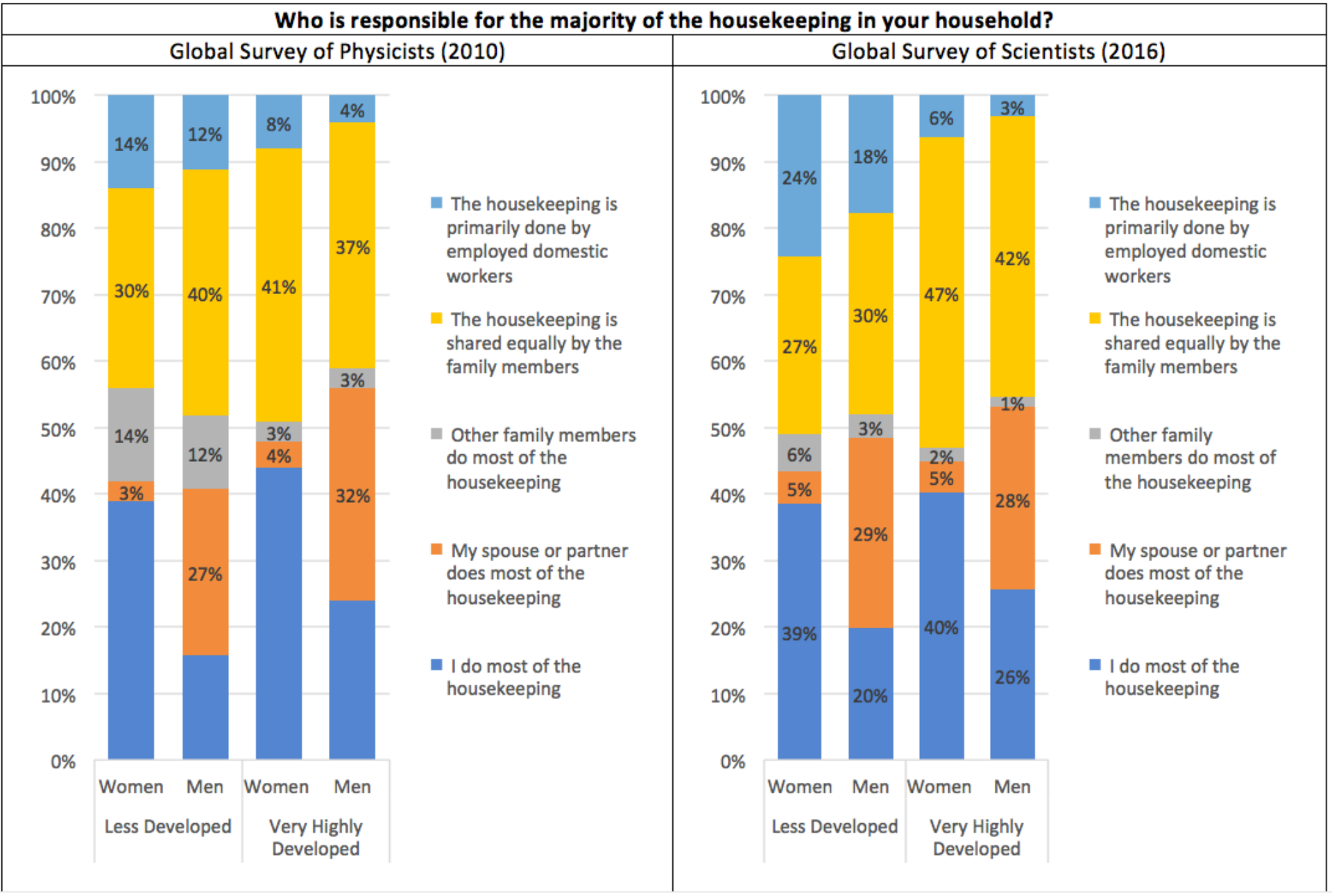
Respondents Comparing Their Salary to Their Spouse or Partner

Global Survey of Physicists (2010)

Global Survey of Scientists (2016)

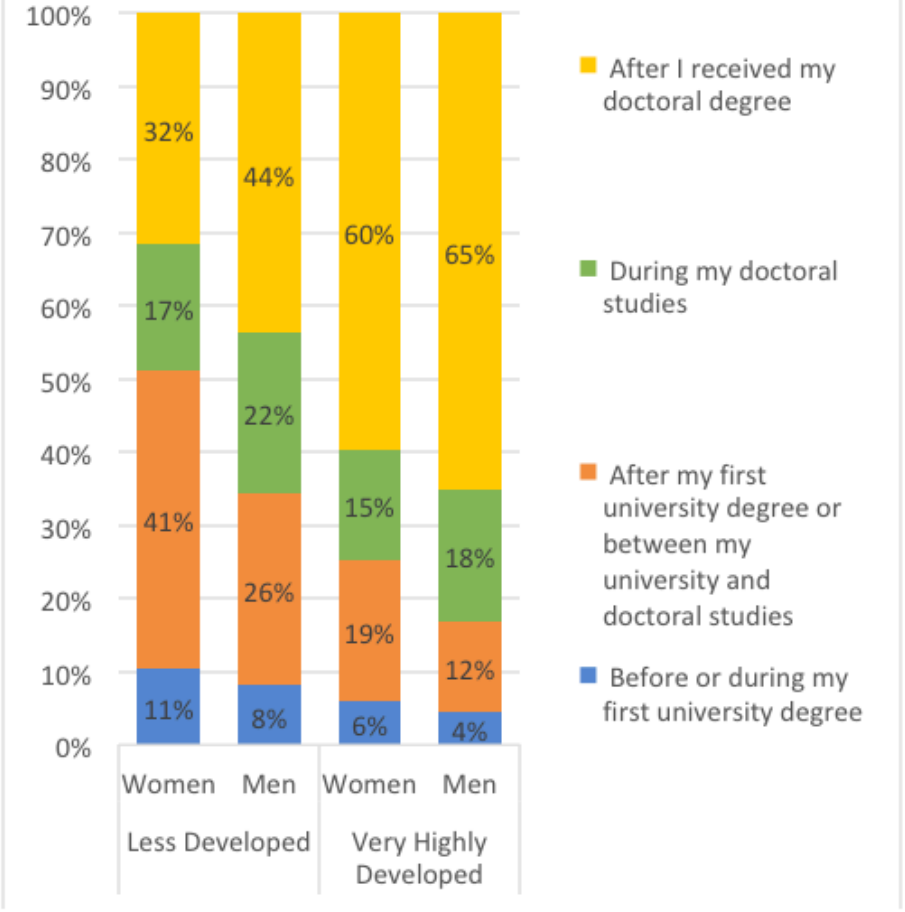


Who is responsible for the majority of the housekeeping in your household?

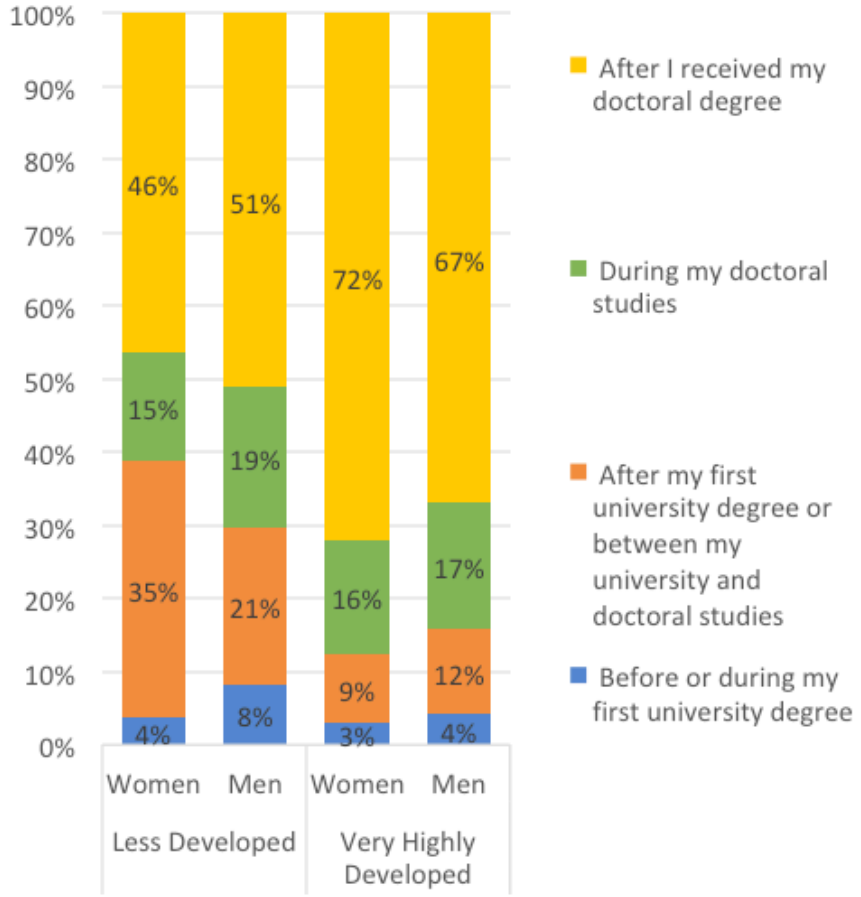


When did you have your first child?

Global Survey of Physicists (2010)



Global Survey of Scientists (2016)



Gender Gap in Science Project, Task 3

Database of good practices classified in terms of 8 dimensions. Problem: only initiatives in English.

Table 4. Distribution of "good practice" dimensions in final database

Dimension	Number of initiatives
1. Social norms and stereotypes	21
2. Primary and secondary education	59
3. Higher education	25
4. Career progression	45
5. Research content, practice, and agendas	12
6. Policy-making processes	13
7. Entrepreneurship and innovation	6

IMU will host the database. We should point to this site from the IUPAP webpage.

Gender Gap in Science Project, Task 2

Analysis of publication patterns

Databases analyzed: ZbMath; ArXiv; ADS

Use of subclassifications within disciplines

Algorithm to assign gender to author

Location: to identify country of affiliation

Plots with options on what to visualize

Final report, currently in elaboration, will be presented at:

Closing activity @ICTP, Trieste, November 4-7, 2019

Hackathon on Thursday Nov 6: please send me email with suggestions of names by the end of October (many of you have already done it!).

Final report, will be made available at website, https://gender-gap-in-science.org/.

Thank you!