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# GENDER EQUALITY ADVANCEMENT IN THE GERMAN RESEARCH LANDSCAPE

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## AN ASSESSMENT FROM A GERMAN PRACTITIONER

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# The German Research Landscape – An Overview

## Non-university research organisations

### Helmholtz Association:

- 18 research centers, 38,036 employees, 42% female employees → 33% scientific employees

### Fraunhofer Society:

- 67 research institutes and research units, 24,000 employees, 32% female employees → 21% scientific employees

### Leibniz Association:

- 89 research institutes and service organizations, 18,144 employees, 53% female employees → 42% scientific employees

### Max-Planck Society:

- 83 institutes and research facilities, 17,284 employees, 45% female employees → 29% scientific employees

## Universities



- In total 427 higher education institutions in Germany (2014/15); 2,7 Mill. students, 45,749 professors
- 108 universities; 216 universities of applied sciences, 52 art colleges etc.

# In Germany a variety of laws and initiatives to promote the equality of men and women exist

## German Laws in the field of gender equality

### Basic Law for the Federal Republic of Germany (Article 3 – 2) [Equality before the Law] (1958):

Men and women shall have equal rights. The state shall promote the actual implementation of equal rights for women and men and take steps to eliminate disadvantages that now exist.

### General Act on Equal Treatment (AGG) (2006):

Purpose of this Act is to prevent or to stop discrimination on the grounds of race or ethnic origin, gender, religion or belief, disability, age or sexual orientation.

### Germany sets gender quota in boardrooms (2015):

Act for the equal participation of women and men in leadership positions in the private sector and the public sector

## German Initiatives to increase gender balance & diversity

### Chefsache:

Sponsor: Dr. Angela Merkel

- 'Chefsache' is a network of leaders from industry and science, the public sector and the media **personally committed** to lead by example to make gender balance a top management priority, exploring new concepts and approaches to promote the **required change of mind-set** throughout society.

### Charta der Vielfalt (Diversity Charter):

Sponsor: Dr. Angela Merkel

- The Charta der Vielfalt is a corporate initiative to promote diversity in companies and institutions.
- The initiative aims to promote the recognition, appreciation and integration of diversity into Germany's business culture. Organisations are to create a working environment free of prejudice.



# A practitioners perspective – Top-Down initiatives have the most impact to promote more women in academia

## Important Top-Down initiatives and programmes in Germany - An Overview:

### Pact for Research and Innovation

- Phase I: 2005-2010
- Phase II: 2011-2015
- Phase III: 2016-2020

#### Impact:

- Greater dynamism and increase in performance in the scientific system
- Sustainable perspectives
- Promote activities for women in science

### Excellence Initiative

- Phase I: 2005-2011
- Phase II: 2012-2017

#### Impact:

- Strengthen Germany as a research location for the long term
- Raise the profile of outstanding accomplishments in the fields of academia & sciences
- Consideration of gender equality policies

### Programme for Women Professors

- Phase I: 2008-2012
- Phase II: 2012-2017

#### Impact:

- Increasing number of female professors
- Strengthens the equality structures at universities by specific equality policies
- Creating role models

### DFG – Research-Oriented Standards on Gender Equality

- Since 2008

#### Impact:

- Self-regulation of DFG-Members
- Definition of standards for a long term policy of equality in the German scientific and academic community



# The following hypotheses are often represented in Germany to explain why few women remain in science

## Hypothesis I:

The Leaky Pipeline: The more women fill the academic base, the more women will get into high positions (e.g. professorship) in academia.

## Hypothesis II:

Necessity of Mobility: Most of the women are not mobile enough to get into high positions in academia.

## Hypothesis III:

Cultural Aspects in Science: Framework conditions and stereotypes exclude women from reaching top-level positions in academia.

# Hypothesis I – The Leaky Pipeline: It is not enough to simply fill the Pipeline

- Studies and experiences show:
  - In US in some humanities there is a high proportion of female PhD students, but women are still underrepresented in top-level positions. (Leslie et al., 2015)

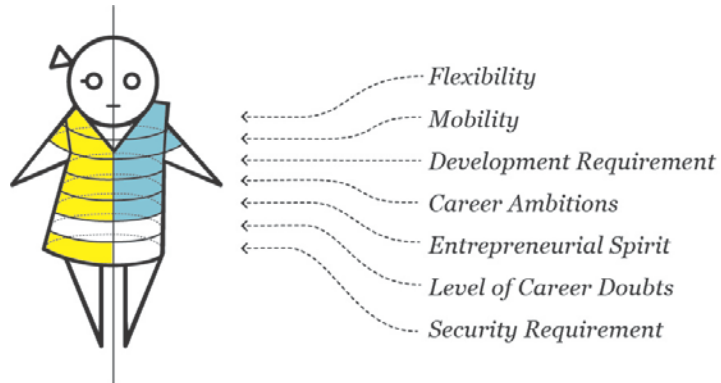
## Example: Study at Max-Planck-Society

- MPG is divided into three different sections: BM-Section , CPT-Section ; GSH-Section
- The largest gender differences can be observed in the GSH-Section which has a traditionally high share of female scientists:
  - Women more often report an overload through pressure, the lack of recognition of achievements and compatibility
  - 20% of the women see - with regard to equal opportunities and compatibility -disadvantages for their own gender.
  - Men assess the overall situation significantly better than women.



Source: Schraudner et al. (2015): Chancengleichheit und Nachwuchsförderung.

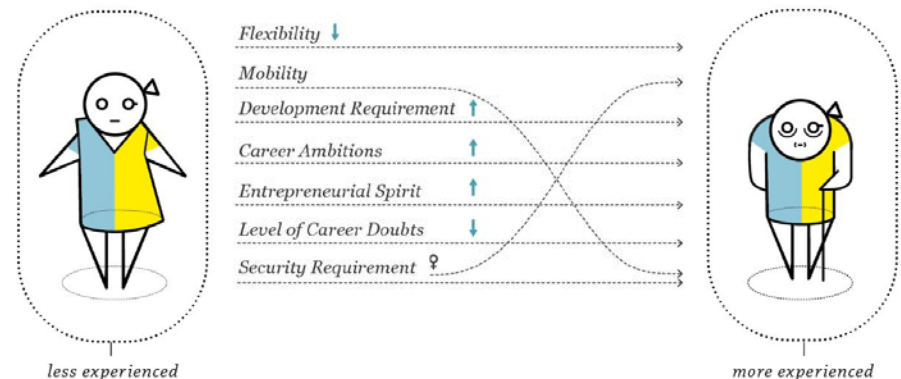
# Hypothesis II – Necessity of Mobility: life stages are more decisive than gender



## The results of the UNITECH International Study demonstrate:

- At the beginning of their professional career both women and men are very mobile and flexible
- Depending on different stages of life the mobility of both women and men decreases

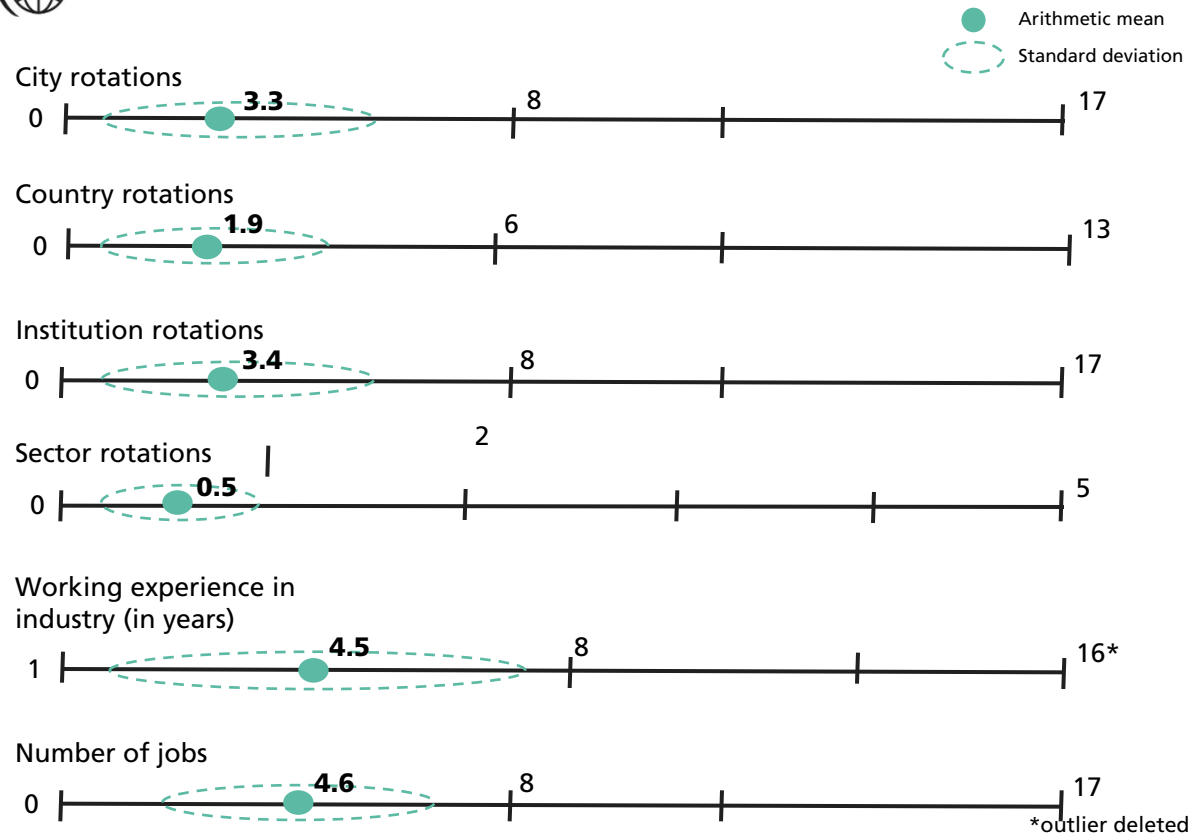
- Whether people are mobile or not, does not depend on their gender, their life stages is more important
- Other studies show similar results (Hüttges & Fay 2013; Jaksztat et al. 2010)



Source: Angelika Trübswetter et al., 2015, Corporate Culture Matters, [publica.fraunhofer.documente/N-328470.html](http://publica.fraunhofer.documente/N-328470.html)

# Hypothesis II – Necessity of Mobility : different patterns of mobility exist

Results based on short CVs from the AcademiaNet Platform:



## Mobility patterns of AcademiaNet scientists vary:

- AcademiaNet women do not show uniform mobility behavior regarding geographical and institutional mobility.
- 24.4% of AcademiaNet women never left the country where they did their PhD.
- Only 6.6% of women in the AcademiaNet network have worked in industry.
- AcademiaNet women who have worked at research organizations show greater (inter-)national and institutional mobility.

Source: Schraudner, 2015, Von Academia Role Models lernen, [publica.fraunhofer.documente/N-332327.html](http://publica.fraunhofer.documente/N-332327.html)



# Hypothesis III – Cultural Aspects: Framework conditions and stereotypes lead women to leave academia

The results based on interviews with exit-candidates:



Gender	9 Female   9 Male
Nationality	German: 11   Others: 7
Employment	TVöD: 11   Scholarship: 7
Awards	11 (ca. 60%)
Research and development reference	existing: 10   non existing: 8
Current employer: Industry   Public sector	15   3

N=18

**Five major types of reasons describe why women and men no longer pursued an academic career:**

- **More Women** criticized the **working culture** and the working climate in the scientific field – Four main aspects lead to frustration:
  - Performance pressure
  - Isolation
  - Visibility
  - Male-dominated culture
- More women than men also criticized the level of appreciation and recognition from their supervisor, which also lead to frustration.

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# Good news for further engagement: Evidence based results show the necessity to promote women in science

Current studies underline the importance of women in the field of academia and the scientific system:

- „In subject areas with more balanced gender distributions, women tend to focus on different topics“ (Elsevier, 2015)
- „For Germany, female-only publications are the most internationally collaborative – Mixed-gender publications are more interdisciplinary but less internationally collaborative than mono-gender publications“ (Elsevier, 2015)
- „An equal gender representation can help to expose the innovation potential of teams.“ (Gratton et al., 2007)
- „The presence of women in a group increases the problem-solving skills of the group as a whole.“ (Woolley et al., 2010)

There is still a lot to do:

- Germany is ranked 5th for patents worldwide (WIPO 2014), only 5% are from women
- Germany is ranked 4th for publications worldwide (SJR Ranking 2015), only 20% are from women

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# THANK YOU

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