GENDER EQUALITY ADVANCEMENT IN THE GERMAN RESEARCH LANDSCAPE
–
AN ASSESSMENT FROM A GERMAN PRACTITIONER

Gender Summit 7 - Europe
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Head of Fraunhofer-Center for Responsible Research and Innovation
Berlin, Germany
The German Research Landscape – An Overview

<table>
<thead>
<tr>
<th>Non-university research organisations</th>
<th>Universities</th>
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<tr>
<td><strong>Helmholtz Association:</strong></td>
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<tr>
<td>- 18 research centers, 38,036 employees, 42% female employees → 33% scientific employees</td>
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<td><strong>Fraunhofer Society:</strong></td>
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<td>- 67 research institutes and research units, 24,000 employees, 32% female employees → 21% scientific employees</td>
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<td><strong>Leibniz Association:</strong></td>
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<td>- 89 research institutes and service organizations, 18,144 employees, 53% female employees → 42% scientific employees</td>
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<td><strong>Max-Planck Society:</strong></td>
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<td>- 83 institutes and research facilities, 17,284 employees, 45% female employees → 29% scientific employees</td>
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- 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.

<table>
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<tr>
<th>German Laws in the field of gender equality</th>
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<tr>
<td><strong>Basic Law for the Federal Republic of Germany (Article 3 – 2) [Equality before the Law] (1958):</strong></td>
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<tr>
<td>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.</td>
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<td><strong>General Act on Equal Treatment (AGG) (2006):</strong></td>
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<td>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.</td>
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<td><strong>Germany sets gender quota in boardrooms (2015):</strong></td>
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<td>Act for the equal participation of women and men in leadership positions in the private sector and the public sector</td>
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<th>German Initiatives to increase gender balance &amp; diversity</th>
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<td><strong>Chefsache:</strong></td>
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<td>Sponsor: Dr. Angela Merkel</td>
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<tr>
<td>▪ 'Chefsache' is a network of leaders from industry and science, the public sector and the media <strong>personally committed</strong> to lead by example to make gender balance a top management priority, exploring new concepts and approaches to promote the <strong>required change of mind-set</strong> throughout society.</td>
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<tr>
<td><strong>Charta der Vielfalt (Diversity Charter):</strong></td>
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<tr>
<td>Sponsor: Dr. Angela Merkel</td>
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<tr>
<td>▪ The Charta der Vielfalt is a corporate initiative to promote diversity in companies and institutions.</td>
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<tr>
<td>▪ 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.</td>
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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

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2005 2008 2017 2020

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Fraunhofer-Center for Responsible Research and Innovation
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.

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

→ 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)

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

Source: Angelika Trübswetter et al., 2015, Corporate Culture Matters, 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
Hypothesis III – Cultural Aspects: Framework conditions and stereotypes lead women to leave academia

The results based on interviews with exit-candidates:

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.

<table>
<thead>
<tr>
<th>Gender</th>
<th>9 Female</th>
<th>9 Male</th>
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<tbody>
<tr>
<td>Nationality</td>
<td>German: 11</td>
<td>Others: 7</td>
</tr>
<tr>
<td>Employment</td>
<td>TVöD: 11</td>
<td>Scholarship: 7</td>
</tr>
<tr>
<td>Awards</td>
<td>11 (ca. 60%)</td>
<td></td>
</tr>
<tr>
<td>Research and development reference</td>
<td>existing: 10</td>
<td>non existing: 8</td>
</tr>
<tr>
<td>Current employer: Industry</td>
<td>15</td>
<td>Public sector 3</td>
</tr>
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N=18
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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
THANK YOU

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