

Invisible control of careers through micro-processes in science organisations

The example of gendered networking patterns in STEM

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10th European Conference on Gender Equality in Higher Education, Trinity College Dublin

GEFÖRDERT VOM



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Issues for further research



National project

Gender bias of women's career paths
engineering and information technology
through informal support relationships and
networks

Funded by the German Federal Ministry of
Education and Research

November 2017 - October 2020

www.gendernetz.de

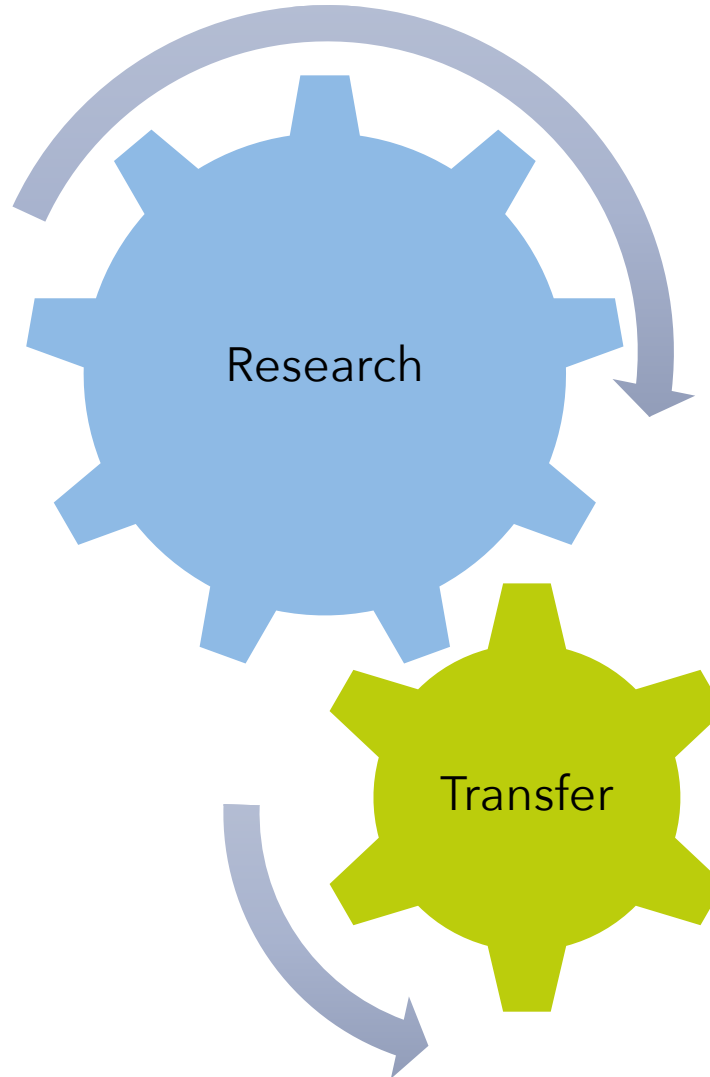
Focusing on the influence of informal networks
for science careers in STEM

- Focus on higher education and industry
- Informal exclusion mechanisms
- Different assessments of informal networking?
- Different (gendered) networking practices?
- Recruitment and support practices
- Influence of gatekeepers (informal influences)

Approach of the GenderNetz project

- Actor-centred analysis of network effects in research careers
- Knowledge of networks' micro-political structures and processes and its gender bias
- Target group specific needs assessment

- Interviews with researchers in the STEM fields (PostDocs)
- Interviews with Gatekeepers
- Focus groups with Change and Transfer Agents



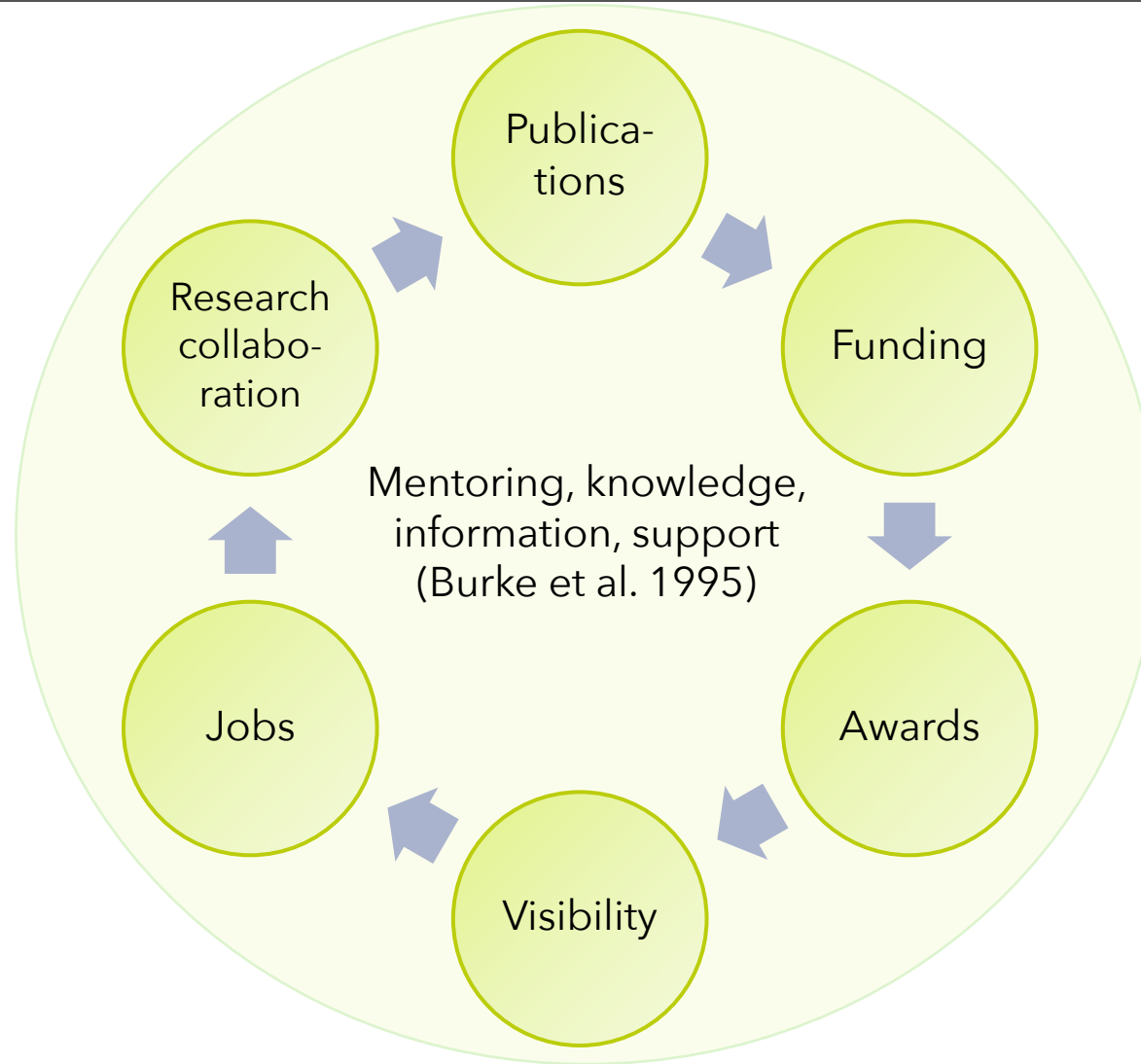
- Intensive research-into-practice communication
- Workshops with transfer and change agents
- Context specific further development of career supporting measures
- Organisation of a transfer conference and transfer products

Networking refers to **behaviour** that supports building and maintaining informal relationships. They have the potential effect to facilitate and optimise common advantages for job related actions of the participating persons by making resources voluntary available. (Wolff and Moser 2006:162)

Relevance of networks for science careers

Women academics engage less in international research collaborations than men (Uhly et al. 2015)

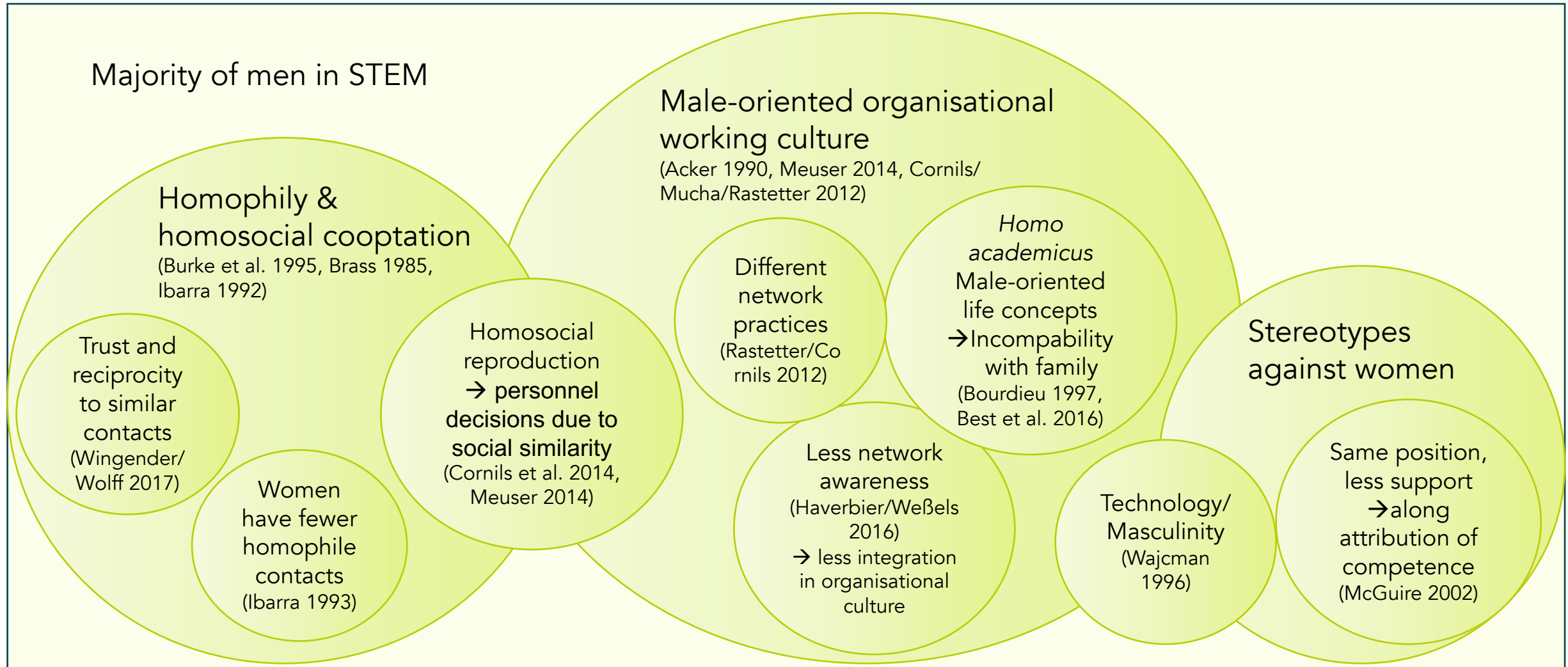
Women's limited networks restricts their possibilities to do research, to publish, to be cited – i.e. to show the marks of status and performance in science (Fox 2010)



Women more likely to get expertise-based resources (reviewing papers and grant proposals) but less likely to get access-based resources (nominations for awards) (Melkers and Kiopa 2010)

→ Organisational network research to understand the barriers for women in higher education through informal networks

Barriers for women in STEM through informal networks



First interview insights from



Examples from interviews

Case I: female engineer, postdoc, higher education sector

Returned from parental leave in 2018 after one year absence.

Being absent from her work place as recurring pattern in her interview:

- Non-visibility in the department (continuous partly after returning because of part-time position)
- Efforts from her side to stay in contact with colleagues and superior
 - Visits at the department, phone calls, mails
- Partly needs to reclaim her position and role upon her return (labelled as “mother of the team”)

Describes herself as non-tactical networker and also sceptical towards networking:

- “I find this networking sometimes totally unnatural and a put-on behaviour.”
- “Small talk is **very** hard for me! If there is any professional entry point, than it works, but otherwise I’m not good at it.”
- “I’m not someone, who walks strategically through a conference venue thinking about to whom to talk.”

Her scientific career until now she sees like cog wheels, meshing into each other.

Examples from interviews

Case II: male engineer, postdoc, higher education sector

He speaks about the fact that it is crucial to have some kind of mentoring especially in the beginning of an academic career:

→ someone who introduces you to the academic world and the rules of the game

He had a strong influence during his PhD time from his female supervisor:

→ Training in “elevator pitches” to sell their research most attractive in 30 seconds

→ “(...) professors realize that their capital also lies a bit in advancing their proteges for enlarging their own network and their visibility.”

He sees importance in networking and acts accordingly:

→ “...I invest relative much time in cultivating my network...”

→ “...those dinners with people having influence, there you say ‘in our team we are doing these cool things and soon we will do this’...”

But he also criticises the influence of networks for academic career progression:

→ “Of course there are professional components, but there is also always this ‘vitamin B’ component, like ‘yes, I know this comes from him and he does good stuff’ and therefore he gets a contract in advance or a leap of faith.”

Relevant extracts from interviews

Differences in personal attitude and acceptance of networking as a strategical action.

- different framing and personal positioning
- but similar practices: increasing visibility of their own person and research



Similar practices but different outcomes for women in science careers?

Equality policies – ,fixing the women‘ vs. ,fixing the system‘

Fixing the women

- Mentoring programs
- „Network of two“ (i.e. mentoring or sponsorship)
- Raising awareness of women for the importance of networks
- Networking coaching/training
 - including also lobbying for own research topics
 - awareness raising for networking activities
 - reflection of own networking behaviour
 - acquisition of network tactics
- Establishment of women networks

Fixing the system

- Transparency and formalisation of appointment and recruitment procedures
- Raising awareness for the importance of networks → gatekeeper, institutional important persons
- Feminist network/gender advisor network providing platforms to change organisational culture and awareness raising (workshops; seminars)
- Uncovering the „lonely warrior“ myth by emphasizing that research is a social activity → knowledge creation through networks

Our other project aims on fixing the system...



**CHANGE —
CHALLENGING GENDER (IN)EQUALITY
IN SCIENCE AND RESEARCH**

www.change-horizon2020.eu
Twitter: @CHANGE_Horizon2020

CHANGE contributes to a structural change towards gender equality by stimulating institutional cultural change towards gender equal work environments in research performing organisations (RPOs) and fostering the importance of gender dimension inclusive research and innovation programmes in research funding organisations (RFOs).

- Supporting RPOs in designing and implementing gender equality plans
- Active involvement of key actors, called Transfer Agents (TAs)
- Co-production of gender equality knowledge inside the institutions
- Mutual learning and networking

Funded by the EC – Horizon 2020
May 2018 – April 2022



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Further information on our current projects:

www.gendernetz.de

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Thank you!