

Impact Story Networking

Impact Story

Networking

Intervention Definition

One of the main reasons for the underrepresentation of women in research and innovation teams and particularly in decision-making positions is their poor involvement in formal and informal networks. Access to and integration in networks are decisive factors for career progress but male researchers generally have better networks than female researchers (Kyvik and Teigen 1996; Fuchs et al. 2001). The degree of integration into relevant organisational networks plays a crucial role for the diffusion of gender equality interventions too. Through networks, new knowledge is transferred into an organisation and engaged employees become empowered (Cacace et al. 2015).

Another aspect refers to the diversity argument and the fact that collaboration influences performance (Lee and Bozeman 2005): whereas networks in which the relationships between the actors consist of strong ties are strongly integrated and intensively interlinked, weak ties have the advantage of building local bridges between so far not connected areas (Granovetter 1973). This promotes the flow of information and other resources and thus the emergence of innovations. There is also evidence that high research performance – demonstrated by high levels of publication - is positively associated with high levels of collaboration (Katz and Martin 1997). Especially international collaboration seems to increase the quality of scientific publications, measured in terms of citations (van Raan 1998, Narin and Whitlow 1991, Polyakov et al. 2017).

The gender equality intervention "Networking" describes interventions that support female researchers in getting access to and becoming integral part of important internal and external networks. Internal networks can consist of networks only dedicated to women in order to ensure "safe spaces" for open communication and exchange; and mixed networks to promote career progress. External professional networks serve to increase the visibility of female researchers as active contributors to (international) co-publications and at scientific conferences.

Networks also play a crucial role in the EFFORTI case studies of the Women Founders Consult (WFC) and of the General Electric Women's Network. WFC has established networks with several other interest groups on the local, regional and national level to promote and disseminate its advocacy and services. Furthermore, WFC also promotes networking of women entrepreneurs through versatile services, e.g., events or a contact database. The General Electric Women's Network was created to attract and support female workforce. Through its events and activities, the Women's Network plays a critical role in improving women's business practices, expanding their personal contacts, building career opportunities, and sharing best practices and experiences in order to facilitate the development of women leaders and to drive business success. The intervention itself consists in institutional support for a website, a network coordinator but also venues and resources to organise network meetings.

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Objectives

- (1) Increase the number of women in R&I positions
- (3) Boost professional capabilities of women to pursue promotion

<p>(4) Implement gender-fair organizational structures</p> <p>(7) Increase R&I outputs and impacts</p>
<p>Output</p> <p>The intervention leads to improved information on existing internal and external professional networks, to an increased number of women involved in those networks and to an enhanced institutional support for networking activities. The latter leads to an increased number of events like workshops or conferences organised by those networks.</p>
<p>Output Short</p> <p>The intervention leads to improved information on existing internal and external professional networks, to an increased number of women involved in those networks and to an enhanced institutional support for networking activities. The latter leads to an increased number of events like workshops or conferences organised by those networks.</p>
<p>Output indicators</p> <p>3.2. Ability to create/enhance/sustain new networks/contacts/collaborations</p>
<p>Outcome</p> <p>The outcomes of particular networking instruments are to be expected at the gender equality as well as the research and innovation area. In the gender equality field, we can expect better visibility and achievement of women, the latter caused by improved knowledge and understanding of advancement prerequisites but also improved skills and better informed career strategies. Access to internal networks may also improve leadership career ambitions and specific competences. Networking may also contribute to the attraction and retention of talented and competent females in science and in leadership positions. At the individual level, the main outcome of the intervention might be the professional development and the career advancement of women employees who take part in the network.</p>
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<p>Outcome indicators</p> <p>1.1.2 Increase in leadership positions by women who participated in the programme</p> <p>1.2.1 Number of new hired faculty</p> <p>2.2.1 Appropriate respect / recognition for (academic, scientific, leadership) work</p> <p>2.3.2 Events to create visibility and credibility and specific types of recognition for women</p> <p>2.3.3 Received personal and professional support from institution</p> <p>3.1.1 Growth of knowledge about local leadership and organisation culture</p> <p>3.2.1 Network was built/has extended and is used to advance career</p> <p>3.3.1 Scale of organisational commitment to gender diversity (measurement through regulations, contract's re-formulation, founding of new initiatives)</p>

Impact

Promoting networks improves research impact by increasing collegial support, knowledge sharing and collaboration across seniority ranks, clarifying pathways to qualifying for permanent positions, as well as better understanding of the norms and culture of the research environment and increased awareness on gender structures in the organisation (Kalpazidou Schmidt and Faber 2016; Gardiner et al. 2007). Top-level support for women networks may also contribute to increase awareness at the organisational level about gender issues and change organisational structures and culture in the long run (Kalpazidou Schmidt and Faber 2016). According to the General Electric Women's Network case study, the managers of career development programmes may learn about the struggles of female researchers and about the gender challenges, they have to face in the workplace. This feedback mechanism can be beneficial to the organisation, since it can bring about substantial changes in organisational culture.

Improved networking with experienced researchers from in- and outside the organisation may lead to an increased number of articles in peer reviewed high impact journals. Enhanced network access will generally lead to more and higher-ranked scientific outputs in terms of publications.

Further impacts include a more sustainable and socially relevant research activity carried out by the company where women networks exist, an enhanced innovation driven by the diversity and the increased scientific and economic competitiveness of the company in the end. By broadening knowledge, skills and abilities, improving decision making skills, increasing self-esteem and motivation, building interpersonal effectiveness, maximising career opportunities and improving employment marketability, women networks in companies also encourage and assist female employees to perform in an enhanced spirit of responsibility, which is mirrored in the overall performance of the company.

Impact short

The intervention will lead to organisational changes by reducing barriers to gender equality and ensuring equal treatment, but will have a particular impact on the research and innovation performance of individuals and organisations.

Impact indicators

- 4.1.1 Level of visibility
- 4.2.1. Rating of transparency regarding decision-making bodies and criteria
- 4.3.1 Perception of preferential treatment such as advice, access to lab or equipment, resources, recruitment, pro-motion, attention to meetings
- 5.1.1 Number and share of female authors
- 5.1.2 Cross-country (also beyond EU) and cross-disciplinary research and innovation networks (incl. SMEs)
- 5.1.4 Reputation and excellence of Europe in scientific and technological research (modernisation of research institutions, vitality of research environment, quality of research outputs in basic & applied research)
- 5.2.1 Improved products, services, processes launched onto the market
- 5.3.3. Leveraged demand for solutions for tackling societal challenges
- 5.3.4 Enhanced innovation capability and competitiveness of European enterprises in global market for innovative solutions (esp. SMEs)
- 5.5.1 Encouragement of gender-balanced teams in the work environment
- 5.7.1 Improved research and innovation culture in EU

Policy Context

Important factors at the policy level which underline the importance of networking interventions are male-dominated working environments that recognise women's expertise less than men's one (see also below). Such working environments are particularly widespread in societies that

still rely on traditional gender roles. Insufficient child-care facilities and inadequate work-life balance promote the dominance of a male breadwinner model. Women are generally less visible and integrated in professional research networks, with negative impacts on their scientific outputs.

Organisational Context

Important factors at the organisational level that underline the importance of networking interventions are male-dominated working environments and leadership cultures. Typical requirements in leadership positions fit the male career path better. A further hindrance for women are the existing "old boys' clubs" that require access to alternative ways of networking. Separated networks for women may support the tendency of women to consider themselves team players rather than individual actors but also to mitigate the lower willingness to risk-taking and self-exposure of women employees and their lack of self-confidence. Largely, women networks can allow strengthening the crucial role of women in developing collective emotional intelligence.

Sources

Cacace, Marina, Doina Balahur, Inge Bleijenbergh, Daniela Falcinelli, Michaela Friedrich, and Evanthia Kalpazidou Schmidt (2015): Structural transformations to achieve gender equality in science: Guidelines. Report to the European Commission. Rome: Ministry of Economy and Finance.

Fuchs, Stefan, Janina van Stebut, and Jutta Allmendinger (2001): Gender, science and scientific organization in Germany. In: *Minerva* 39 (2): 175-201.

Gardiner, Maria, Marika Tiggemann, Hugh Kearnes, and Kelly Marshall (2007): Show me the money! An empirical analysis of mentoring outcomes for women in Academia. *Higher Education Research and Development* 26 (4): 425-442.

Granovetter, Marc (1973): The Strength of Weak Ties. In: *American Journal of Sociology* 78: 1360–1380.

Kalpazidou Schmidt, Evanthia, and Stine Thidemann Faber (2016): Benefits of peer mentoring to mentors, female mentees and higher education institutions. *Mentoring & Tutoring: Partnering in Learning* 24 (2): 137-157.

Katz, J. Sylvan; Martin, Ben R. (1997): What is research collaboration? *Research Policy* 26 (1): 1-18.

Kyvik, Svein, and Mari Teigen (1996): Child care, research collaboration and gender differences in scientific productivity. *Science, Technology and Human Values* 21 (1): 54-7.

Lee, Sooho, and Barry Bozeman (2005): The impact of research collaboration on scientific productivity. *Social Studies of Science* 35 (5): 673-702.

Narin, Francis; Whitlow, Edith S. (1990): Measurement of scientific cooperation and co-authorship in EC related areas of science. Luxemburg: Office for Official Publications of the European Communities. EC-Report EUR 12900.

Polyakov, Maksym; Polyakov, Serhiy; Iftekhar, Md Sayed (2017): Does academic collaboration equally benefit impact of research across topics? The case of agricultural, resource, environmental and ecological economics. *Scientometrics*.

Van Raan, Anthony (1998): The influence of international collaboration on the impact of research results. Some simple mathematical considerations concerning the role of self-citations. In: *Scientometrics* 42 (3): 423-428.