

Introduction – EU policy making

EU policy has been a persistent force for advancing towards a more gender equal academia. Various cycles of revised policy making have gone from “fixing” the women (e.g. skills training and mentoring), to “fixing” the institutions (implementation of gender equality plans) towards “fixing” the knowledge (integrating a gender dimension in research methods and content). The GEDII project contributes to the latter by examining how gender issues affect the collaborative production of knowledge by research teams.

Why is the EU level policy making important?

Gender equality is a cross-cutting issue at EU policy level including the EU Strategic Engagement for Gender Equality (2016-2019), a priority for the European Research Area (ERA) or dedicated funding regarding implementation of gender equality plans in the H2020. Whereas policy measures have targeted largely individuals or organizations, the team- or group level issues have received much less attention. Two EU policy areas where GEDII insights on the gender aspects of R&D teams are especially relevant can be identified. First, ERA priority 4 *Gender Equality and Gender Mainstreaming in Research* which focuses on 1) Scientific Careers, 2) Gender Balance in Decision Making, and 3) Integration of Gender Dimension in Research. Second, the gender aspects of team work have important consequences for assessing and monitoring the impact on research participation and quality of H2020 and European Research Council (ERC) funding. In addition, other important EU level policy schemes such as the Human Resource Strategy for Researchers (HRS4R implemented by Euraxess) are relevant from a gender perspective because of overlap with the criteria often included in GEPs, and hence should incorporate team level considerations, such as gender balance in who is invited to join the team and what role they are allocated.

Key points and recommendations

Currently there are no policy actions that would specifically target gender aspects at the team level within Europe. An important point of departure therefore consists of indicating how GEDII results interface or potentially impact existing policy initiatives, especially as the importance of team science is growing trend and membership of a team is an important aspect of PostDoc training.

- Although science has become a team effort, scientific careers are evaluated based on individual merits. The EU policy level should become an important driving force in establishing schemes to explicitly recognize team efforts and the distribution of credit for individual researchers. This is an unresolved issue that needs to be addressed across various initiatives such as Human Resource strategies (HRS4R) and gender equality initiatives (ERA priority) alike.
- More gender inclusive teams are a means to address the gender productivity gap between women and men in science. R&D teams are thus an all-important area of intervention for retaining women in science and advancing their careers, addressing thus ERA Priority objectives 1) + 2)

- GEDII has direct relevance for the ERA Priority objective 3) to integrate the gender dimension in research methods and content by emphasizing that gender aspects can bias the production of quality knowledge.
- R&D teams constitute an all-important organizational-, scientific- and often social context where individual researchers develop their work. As such, the team environment and team climate shape the experience of conducting research in important ways and play a key role regarding decisions to stay-on or to leave. Addressing the ERA Priority objective of women participation in science, GEDII underscores the importance of supportive team climate for both attracting and retaining women in science.

An important new instrument for monitoring gender aspects at the team level along these lines is the Gender Diversity Index developed by the GEDII project. It is a composite indicator to measure the participation of women and men in teams in a more elaborate way across seven pillars including age, education, care responsibilities, marital status, type of contract, seniority and team tenure.

- Integrated into H2020 proposal writing, the GDI can provide a more elaborate account on the gender inclusiveness of the applicant team beyond simply counting the “women on the team”, taking into account equal representation and attrition along 7 pillars.
- The GDI is a valuable new instrument for monitoring the potential impact of more gender inclusive teams on research performance. At the EU policy level this could be achieved through integrating GEDII tools into the next round of ERC or H2020 monitoring.
- The Gender Diversity Index should be incorporated into the design of Gender Equality Plans (GEP) via existing instruments such as the GEAR tool to raise awareness regarding the importance of gender aspects for teams and monitor the potential impact of GEP measures.

Five Must Reads

Sarsons, Heather. 2017. “Recognition for Group Work: Gender Differences in Academia.” *American Economic Review: Papers and Proceedings* 107 (5): 141–45. → *Pitfalls of gender blind credit allocation*

Slater, Amy. 2018. “Top Tips for Gaining Recognition on Team Science Projects | The Academy of Medical Sciences.” April 24, 2018. <https://bit.ly/2CGjzKx> → *Practical credit allocation tips for collaborative research*

European Commission. 2016. “Horizon 2020 Annual Monitoring Report 2015.” Commission Staff Working Document SWD(2016) 376 final. Brussels. <https://bit.ly/2D5B0Ej>

National Research Council (U.S.), Nancy J. Cooke, and Margaret L. Hilton, eds. 2015. *Enhancing the Effectiveness of Team Science*. Washington, D.C: The National Academies Press. → *Excellent state of the art regarding team science*

Bennett, Michelle L., Howard Gadlin, and Christophe Marchand. 2018. “Collaboration and Team Science: A Field Guide. 2nd Edition.” 18–7660. National Cancer Institute, U.S. Department of Health & Human Service. → *Excellent practitioners guide to building effective teams*