

Women's career boost

1. Introduction

The deliverables D3.2 and D3.3, Draft and final reports on women's careers progression were prepared in October 2020 and July 2022, respectively. The reports were based on the information and data received from CHANGE project partners that defined Gender Equality Plans - GEPs during the course of the project. These project partners (NIB – National Institute of Biology, Slovenia; UAVR – University of Aveiro, Portugal; BBC – Beit Berl College, Israel; UNIZA – University of Žilina, Slovakia; IFAM – Fraunhofer IFAM, Germany) were asked to fill in the joint self-assessment forms. This exercise was performed twice, first in September 2020 and the second in February 2022. This was important to determine any perceived impacts of the CHANGE project and its GEPs (Dahmen-Adkins & Thaler, 2022) on individual careers of staff members of each GEP implementing institution. In addition, potentials of improving career progression opportunities and conditions for female researchers in each GEP implementing institution were assessed.

Indeed, the European Research Area and Innovation Committee (ERAC) Standing Working Group on Gender in Research and Innovation identified the pervasiveness of various types of gender bias in research assessment in its policy brief (ERAC, 2019). These gender biases affect women on all career levels and are especially important for their career progression. There is an increasing interest for assessment of gendered inequalities in science. This is evident through an increasingly rich scientific literature as assessed through the Scopus research database in October 2022 (Figure 1). Three keywords were used to show that the number of scientific literature assessing the leaky pipeline (a phrase used to describe the dropout of underrepresented genders through the career progression), glass ceiling (a metaphor used to describe the inaccessibility of higher career stages) and gender and career progression has been steadily growing. The inequalities are also backed up by evidence from SHE Figures (2021). We therefore believe that solutions and recommendations should be identified and promoted at all levels. They can mitigate these gaps to decrease the "lost" potential of female scientists who drop out or do not progress along their scientific career tracks on the same pace as their male peers.



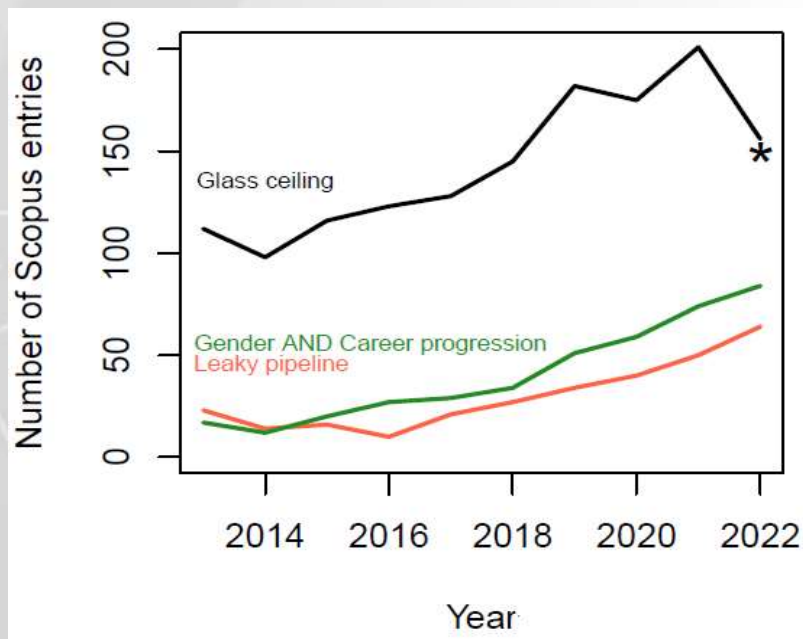


Figure 1: Research publications retrieved in Scopus in October 2022 based on three keywords that are connected to biased career progression of women: Glass ceiling, leaky pipeline, gender AND career progression. The asterisk for the year 2022 serves to highlight that not all the publications for this year have been included as the year is not finished.

As a methodological rationalisation it can be explained that these solutions and recommendations should be implemented at both directions: top-down and bottom-up. Changes should be initiated at the policy level of organizations, by addressing gender aspects, as well as at the individual level – by enabling changes in capacity, self-efficacy and willingness of women to initiate and stand for gender sensitization in their work environments.

The analysis of self-assessment forms allowed to identify five drivers for a sustainable change towards equal career conditions and opportunities for women:

1. **Soft communication.** Soft communication is initially needed to prevent staff members from “shying away” from the gender-related topics. This can then be capitalized for other purposes, e.g., project management and, fairer promotion.
2. **Awareness raising.** This allows to educate people about gender-related topics, including gender bias that prevents equal opportunities in career progression. In addition, such activities enable to construct a strong sense



of commitment and collaboration among employees or network members, therefore provide an effective platform to promote gender equality or other important issues within the organization.

3. **Increased visibility.** The collaboration in projects such as CHANGE gives visibility to its team members and topics covered (gender equality, research integrity, ethical issues, non-discrimination, diversity etc. which are topics that are not always covered in CHANGE GEP implementing institutions). These kinds of collaborations and increasing importance of gender topic in the scientific community in future might have positive influence to the individual careers internally in the organizations, as well as nationally with other organizations (RPOs and RFOs). Increased visibility (individual or organizational) can be a catalyst for entering future collaborations that can impact the career progression.
4. **Targeted measures.** The planned activities need to be concrete, enabling the community building and exchange of good practices and opinions. Moreover, activities should be tailored to the national and institutional culture as well as institutional needs.
5. **National legislation.** Changes of institutional rules or even (inter)national legislation enable a more sustainable implementation of gender-related initiatives. Institutional and national changes establishing mandatory requirements related to the promotion of gender-related topics will foster development of a more gender-equal society. At the same time, gender-equal society allows a faster pace for career progression of female colleagues.

2. Recommendations

The women's career progression can be impacted by these recommendations on four levels (Figure 2):

- **Nano level:** personal/individual adjustments
- **Micro level:** within the project partners' organization. Typically this level involved the projects team members, TAs or CHANGE ambassadors.
- **Meso level:** within the project consortia, national or international communities of practice. Examples: CHANGE consortium during regular project meetings (in-person and online), during the external stakeholder workshop in April 2022 in University of Aveiro, Portugal. A session dedicated to sustainability of GEPs had the aim of obtaining feedback on personal and institutional sustainability.
- **Macro level:** national or international legislation change.





Figure 2: Levels of impact on career progression.

Our recommendations are structured accordingly. The reader is advised to use these recommendations in addition to the recommendations by ERAC (2019), which targeted the research funding organizations and are focused on research review and evaluations.

NANO LEVEL (personal)

Work-life balance

- Avoidance of business travelling on weekends or holidays.
- Planning the workload and working hours in advance.
- Introduce the self-evaluation before agreeing on additional tasks.
- Asking for help (permanently or temporarily) to decrease/prioritize the workload.
- Clear distinction between work and private life and respect of the boundaries of others.
- Interruption of free time only in case of emergency.
- Provide support for colleagues.
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MICRO LEVEL (organizational)

Gender mainstreaming

- Inclusion of gender in the institutional founding act, rules, procedures and practices.
- Establishment of contact points, which can be addressed in the cases of inequalities, discrimination, and gender-based violence. Please note that these tasks do not need to automatically be assigned to the human resources, but instead based on the profile, expertise, social skills and willingness to perform such duties.
- Making GEP an essential part of the organization. GEP should be an alive document that is changing according to the circumstances, it cannot be seen only as an obligatory EU requirement and yet another “tick the box” exercise.



- Careful use of the terminology, tailored to the institutional culture. For example, diversity can be used instead of gender equality.
- Use of soft communication measures and tools (e.g. informal gatherings, innovative promotional material such as game cards with female staff members etc.).

Monitoring and gender disaggregated data collection:

- Establishment of mechanisms of collection of quantitative and qualitative gender disaggregated data.
- Assignment of persons responsible for data collection and monitoring.
- Use of gender disaggregated data as a supporting material in the communication with decision/policy makers.
- Established annual key performance indicators to monitor the progress/regress of women career progression and efficiency/inefficiency of used measures/tools.
- Report on institutional gender equality level should become a mandatory part of institutional annual performance report.

Leadership

- Introduce the possibility of shared leadership between more people.
- Nomination of deputies.
- Rotation of leadership positions.

(more on leadership is available from CHANGE Policy brief on leadership, 2022).

Awareness raising and trainings:

- Yearly awareness raising trainings of staff members should become mandatory elements of annual trainings/workshops.
- Awareness raising activities must be tailored and adapted to institutional and national culture and context.
- Assign personnel that is responsible for organizing awareness raising activities.
- Follow national and international “trends” concerning topics to be covered by awareness raising activities. For example, the #MeToo movement showed that sexual harassment is widely present and the society does not have enough knowledge about it.
- Awareness raising activities should include activities to train the soft skills as well.
- Use of creativity with awareness raising measures and manners.
- Presentation of good practice examples and role models existing in the institution. This allows the personalization of the subject for newcomers.



Mentoring, sponsorship, coaching and support

- Establishment of efficient mentoring and sponsorship systems.
- Networking with other R&D institutions having mentoring schemes in place or through the eument-net network (European Network of Mentoring Programmes for the Advancement of Equal Opportunities and Cultural and Institutional Change in Academia and Research).
- Encouragement of cross-gender mentoring, where female staff members have men as mentors or vice versa.
- Support of informal mentoring/coaching schemes.
- Establishment of mentoring evaluation systems for both mentors and mentees.
- Establishment of online mentoring.

Career development paths

- Establishment of career management plans and monitoring mechanisms of their implementation.
- Inclusion of gender sensitive criteria in individual performance assessments.
- Institutionalisation of parallel and alternative career tracks, such as interdisciplinary, professional practice or applicative expertise tracks, as equivalent to the research track.
- Apply gender sensitisation in recruitment, promotion and funding criteria, to enable women equal opportunities. For example, consider ‘professional age’ instead of ‘biological age’ taking into consideration maternity leave or other leaves due to life circumstances’ or assess ‘transparent jobs’ (frequently performed by women) as equivalent to ‘research productivity, such as teaching, academic administration, memberships in committees and boards or other contributions to the scientific community.
- Acknowledge “transparent jobs” as equivalent to scientific research (e.g. teaching, academic administration, membership in committees and decision-making bodies, organization of conferences, academic ‘housekeeping’, contribution to the academic community etc.)

Work-life balance

- Improvement of institutional work-life policies: use of flexible working hours, possibility of work from home on fixed or flexible schedules, possibility of part-time work as a temporary or permanent solution, establishment of core working time.
- Improvement of working environment and organizational culture: scheduling only necessary meetings on core working days within core working hours, sending and following a pre-agreed agenda, organization of international events from Tuesday to Thursday, allowing Monday and Friday as travelling days.
- Use of surveys and questionnaires to identify any problems and accordingly introduce corrective measures.



MESO LEVEL (networks)

Awareness raising and trainings:

- Establishment of institutional/national databases of gender experts that would be able to provide gender related trainings.
- Provide train the trainers sessions for future experts to maintain the pool of trainers.

Fostering the creation of networking culture

- Creation of informal and formal national or/and institutional networks connecting RPOs from various fields.
- Joining already existing CoPs on international level (e.g. the CoPs created within the [ACT project](#)).
- In the framework of informal/formal networks, advocacy groups can emerge. They are important for the communication with policy makers (macro level).
- Promotion of best practice examples and co-creation of knowledge within the networks.

MACRO LEVEL (legislation)

Funding

- Gender equality initiatives should receive stable funding. Attention and effort to gender equality cannot be limited by the duration of national or international projects. This will ensure a continuous work that can assist in advancing female staff member's careers.
- Specific calls should be prepared including gender related evaluation criteria.

GEP implementation and monitoring

- The formal adoption of GEPs should become obligatory for all public institutions (e.g. RPOs, ministries, RFOs, etc.) and industry (excluding micro SMEs), regardless of their intent to apply for EU funding or not.
- Establishment of (inter)national control point monitoring implementation of GEPs.

Trainings

- Mandatory trainings within RFOs and RPOs on gender-related topics, such as unconscious bias, discrimination, research integrity, etc.

Recruitment procedure:

- Mandatory requirement for all RFO and RPOs to establish gender balanced recruitment commissions/evaluators/procedures.
- RFOs and RPOs should request gender blind CVs in the recruitment procedure.



3. Conclusion

Boosting women`s careers is not only an individual need for women in science to grow professionally, it also has positive institutional impacts as it fosters teams` diversity and at the same time increases productivity. During their careers, women face several obstacles that prevent or slow down their career progression. These obstacles vary and depend on institutional and national environment and context.

Gender stereotypes, unconscious bias and unfair promotional systems are still present in many scientific communities and make it difficult for women to progress their careers. Implementing tailor made GEPs on the institutional level and sustaining the actions therein can mitigate these barriers and imbalances.



Biography

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