Jennifer Dahmen-Adkins & Anita Thaler (eds.)







Customised CHANGE

Co-Producing Gender Equality Knowledge in Science and Research







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FOREWORD



Jennifer Dahmen-Adkins RWTH Aachen University Institute of Sociology



Anita Thaler

IFZ – Interdisciplinary Research
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his publication is the result of four and a half years of experience and joint effort as part of the CHANGE project. The project consisted of five institutions new to the field of institutional gender equality work that set out in cooperation with two experienced partners to design and implement gender equality plans (GEPs) for their respective science and research organisations.

The focus was co-producing gender knowledge jointly within this group of CHANGErs. The aim was to customise the contents of the respective GEPs to each specific target group, and later on to execute it with the help of further stakeholders from research performing organisations (RPOs) and research funding organisations (RFOs).

The structure of this publication is divided into three sections. The first contains background information on CHANGE and theory-based reflections on gender inequality in scientific and academic organisations and why it persists – and, more importantly, strategies for promoting gender equity and diversity.

In part two, CHANGErs report on their experiences and the lessons they learned during the GEP design and implementation process. Among other things, the practical examples show how crucial it is to tailor plan development in order to acknowledge and defuse resistance to ensure the success of your GEP. For example, readers gain insights into the approaches taken in a multicultural and diverse academic organisational environment, as well as in one of the leading institutions for applied research in Europe.

The third section focuses on the Central and Eastern European countries (CEE). Representatives from the Czech Republic, Hungary, Poland, Slovakia and Slovenia talk about their experiences with institutional gender equality (policy) work, often in the shadow of deep-rooted political and social resistance to these issues, and how they can circumvent these obstacles to bring about change despite such preconditions.

"Customised CHANGE" has been written by a diverse team of CHANGErs for both practitioners who may be starting from scratch as well as gender experts, for gender scholars and managers of RPOs and RFOs to policy-makers and decision-makers.

Jennifer Dahmen-Adkins & Anita Thaler with strong support from the CHANGErs.

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Mina Stareva Deputy Head of Unit for Fair societies and Cultural change unit in DG Research and Innovation

Athanasia Moungou Policy officer at the Gender Equality sector, DG Research and Innovation, **European Commission**

ender equality benefits research and innovation (R&I) by improving the quality and relevance of R&I, attracting and retaining more talent, and ensuring that everyone can maximise their potential. Furthermore, as gender equality is a fundamental value of the

European Union, the European Commission is committed to promoting gender equality in R&I as part of the European Commission's Gender Equality Strategy for 2020-2025, which set out the Commission's broader commitment to equity across all EU policies. With the European Research Area (ERA) Communication of July 2012, the European Commission set three objectives to achieve in collaboration with EU Member States and stakeholders:

- Gender equality in scientific careers
- Gender balance in decision-making
- Integration of the gender dimension into the content of research and innovation

To address these three underpinning objectives, the European Commission has been promoting an institutional change approach, through the implementation of Gender Equality Plans (GEPs) with the aim of achieving long-term sustainable structural change in research organisations and higher education institutions. The Commission has been funding projects on institutional change under FP7 and Horizon 2020. GEP projects, including CHANGE, have been models and catalysers for action at the national level in many countries and are prime examples of institutional changes that live well beyond the life of the project. The present handbook is a concrete example of the project's successful efforts.

Nevertheless, as it was highlighted in the 2020 ERA Communication and as the latest She Figures edition showed, gender inequalities remain persistent in the R&I system across Europe, and a gap lingers between the adoption of policies and strategies at EU and national level and their implementation at institutional level. At the same time, there is a need to better address diversity through inclusive approaches to gender equality.

Through the current framework programme for R&I, Horizon Europe, the European Commission further strengthened gender equality provisions, including a requirement to have in place a gender equality plan as an eligibility criterion for accessing funding, applicable for all public bodies, research organisations and



higher education establishments from Member States and the countries associated with Horizon Europe. Promoting institutional change in R&I organisations through GEPs is one of the most significant policy instruments to achieve long-term, sustainable advancement towards gender equality in R&I.

Under the Widening Participation and Strengthening the European Research Area Work Programme of Horizon Europe, the European Commission continues funding projects on the implementation of **inclusive Gender Equality Plans** to support the eligibility criterion, in line with the ERA Communication and gender equality objectives.

The 2021 Ljubljana Declaration on Gender Equality in R&I defined the priority areas of **common action** between the European Commission, Member States and stakeholders to promote gender equality and inclusiveness in the new ERA.

Learn more about the European Commission's policy on gender equality in R&I here (link: https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/democracy-and-rights/gender-equality-research-and-innovation_en#gender-equality-plans-as-an-eligibility-criterion-in-horizon-europe)

The European Commission highlights good practices and initiatives from projects on gender equality in R&I. Make sure to check:

- The GEAR (Gender Equality in Academia and Research) tool, which offers step-by-step guidance and tools for all stages of institutional change, from setting up a Gender Equality Plan to evaluating its real-world impact, including good practices from the CHANGE consortium.
- The detailed <u>Guidance document on Gender Equality Plans</u> to support organisations in meeting the Horizon Europe GEP eligibility criterion, providing concrete practical examples and good practices at national and institutional levels.
- The <u>Factsheet on Gender Equality</u>: a strengthened commitment in <u>Horizon</u> Europe.



The present handbook is a concrete example of the project's successful efforts."



Minister Prof. Dr. Martin Polaschek

Federal Minister for Education, Science and Research in Austria © BKA/Andy Wenzel

The European Commission sent a clear signal by making gender equality plans a mandatory criterion for receiving research funding in the framework of Horizon Europe. Going forward it is important to make use of this positioning, both at an international and national level. In this sense a well-coordinated cooperation between decision-makers at a political and institutional level is required.

Currently we are working on the Austrian Action Plan for the European Research Area 2023–2025, gender equality is one of the many lines of action. We put great emphasis on cooperating with stakeholders and bundling expertise. The goal is to develop a common understanding of gender equality goals and establish minimum standards, as well as to develop and implement coherent gender equality measures for the Austrian higher education and research area.



Quotes from Austria

S L N H





Managing Partners Austrian Research Promotion Agency FFG © Martin Lusser



Dr. Klaus Pseiner

Managing Partners Austrian Research Promotion Agency FFG © Fuertbauer

Because gender mainstreaming is a crucial part of success, FFG promotes the gender dimension in all facets of research funding. Team diversity fosters innovation. Research and innovation that integrates the gender dimension leads to better outcomes; the products and services are more in line with the needs of the people for which they have been created. Who would want to pass up all of these advantages?



Christian Berger

Expert in the Digital Affairs Unit and Economic Policy Department of the Austrian Federal Chamber of Labour The fundamental value and legal principle of equality between women and men – gender equality – is of particular importance in European politics and European law: Under the title of gender mainstreaming, the European Union is pursuing the goal of promoting equality as a cross-cutting issue in all policy areas and at all institutional levels, including in the area of public research funding.

Too often, gender equality in research projects was/is reduced to sex counting. Although the non-discriminatory and equal participation of women and minorities in research processes is of paramount importance, from an impact-oriented perspective, it is the concrete design and objective of research that matters, especially publicly funded applied research.

In view of disruptive technological developments, The Austrian Chamber of Labour established a Digitisation Fund Work 4.0 and has set itself the goal of democratising digitisation processes in the world of work and the development and use of new technologies through applied research and all kind of corporate and civic society projects. Equality in the digital transformation was, for one, the subject of a research call of our own (in Austria, in terms of research content, we simply knew too little about, for example, the connection between the gender pay gap and automation or the effects of Al assistance systems in the workplace on inclusion/exclusion); but, secondly, equality is relevant as a cross-cutting issue in all calls for project proposals and impact measurement. These are not least accompanied by professional discussions and also deconstructions of notions for an ideal project and ongoing processes of understanding about the real, best possible projects by the funding institution.

An example of one such project, among many others, is the development of a German-language stereotype-decoder called "JADE", which can be used to check job advertisements for potentially discriminatory phrasing and correct it to improve the chances that, e.g., women, persons perceived to have migration backgrounds and older people do indeed apply.

Such projects can help to make the digital transformation (more) discrimination-free and initiate social learning processes. The latter are highly relevant prerequisites for the successful, sustainable implementation of (research-based) gender equality in practice. Gender and gender equality must be talked about, controversially and constructively – after all, these are political issues of cooperation and living together.



Dr. Arn Sauer

Co-Director Federal Gender Equality Foundation Germany © Monika Keiler

Rendering intersectional gender dimensions relevant to research and research methodology contributes to—, in fact is essential for excellent research, serving all people. Therefore, gender mainstreaming as an all-encompassing approach is needed in doing research as well as research funding in order to safe-quard the cross-cutting application of a gender lens. Gender action plans are vital in this process; they can provide tools, set targets and monitor outcomes.

Dr. Anette Steinich

Head of Division responsible for Equal Opportunities and Diversity in Academia and Research at the Federal Ministry of Education and Research

Gender-sensitive research increases the effectiveness of its results across a broader spectrum, making them more relevant and accurate. It contributes to the constitutional commitment to support the practical implementation of equal rights for women and men and to work towards eliminating existing disadvantages. Equality in the research system starts at various levels: the dismantling of structural disadvantages, the guarantee of equal opportunities for participation and a self-determined lifestyle for all genders that is free of traditional role patterns.



Dr.-Ing. Thomas Kathöfer

Chief Executive of the German Federation of Industrial Research Associations "Otto von Guericke" e.V ωΔiF

A research funding policy that, in addition to promoting innovation, also aims to strengthen gender equality can only be effective and successful if sufficiently qualified, committed and motivated employees are available. Relevant measures of the European Commission that address all areas of life, initiatives that take the entire education chain into account, such as the MINT Action Plan 2.0 of the Federal Ministry of Education and Research or the focused career-building programmes of Femtec GmbH are effective in this regard and should definitely be continued and expanded.



Michael Edelwirth

Head of Internal Research Programmes at the Fraunhofer Division Preliminary Research and International Affairs

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Quotes from Germany

Application-oriented research in engineering and natural sciences in particular takes place predominantly within the framework of project funding. Unfortunately, the proportion of female project leaders is increasing rather slowly and is symptomatic of the fact that the path to gender-equitable science funding is still a long one. Therefore, a high sensitivity for gender and diversity aspects is necessary among researchers, company management as well as funding bodies.



Dr. Anat Lapidot-Firilla

Fulbright Israel Executive Director © Photo Farag, Tel Aviv

We at Fulbright Israel attach great importance to gender equity and diversity and see it as an important civic value on the road to our success. Organisations and societies that were open to diversity and inclusion of women have prospered. It is our policy to encourage people from different communities and different backgrounds, of all beliefs, origin, gender and geographical and socio-economic status to take part in our programme. If our vision is realized, the organisation will be sustainable and new areas of knowledge that we cannot currently imagine will come to our door.



Prof. Hagit Messer-Yaron

Professor of Electrical Engineering, and former Vice-President for Research and Development, Tel Aviv University

Former Vice-Chairperson, Council of Higher Education of Israel Former President, Open University, Israel Former Chief Scientist, Ministry of Science of Israel © Omri Yaron

Gender bias against women in academia is indicated in any of the following: the gender dissimilarity in various academic fields - the horizontal dimension; the rate of promotion of women vs. men – the vertical dimension; and the third, the hidden dimension - the retention of women in academic careers. Therefore, a key point in advancing women in academia is routine monitoring of these three dimensions and disclosing the findings. Academic leaders at all levels are responsible for reducing gender bias in the three dimensions, by the means most suitable for their environment.



Prof. Rachel Erhard

Chair, Afik in Academia, Israeli Women University Professors' Forum © Rachel Erhard



Gender equity must be accepted as an organisational core value and not merely as a programme. Therefore, the change process has to be systemic, comprehensive, sustainable and strategically well planned. Gender equity will be achieved only if management, policies and decision makers are deeply committed to the change process and routinely express it symbolically and practically. Talk the talk and walk the walk



Dr. Sharon Rashi-Elkeles

CEO & Co-founder of EVE - Femtech Hub LTD Chair of the Council for the Advancement of Women in Science and Technology, The Ministry of Science and Technology, Israel © Avigail Perl

Gender equality in research and innovation organisations is key to ensuring that technology serves all of society, as well as ensuring that the research and innovation industry has the human resources and brain power to reach its potential. We applaud every step taken by the Horizon programme to further this goal. We want to see as many Israeli RFOs and RPOs as possible building gender equality plans and participating in projects to advance gender equality.



Prof. Yifat Bitton

President, Achava Academic College Chair, Tmura Center for Equality © Avi. Besor

It is the responsibility of the institution's leader to remain aware of potential gender discrepancies inside the organisation and to devise innovative strategies to address them. True leadership would make these institutional steps transparent and ensure that the institution's primary organs are involved and engaged in the programme, allowing women faculty to feel supported and instilling faith in their ability to change their fate while also changing the institution itself in favour of gender equality.



Dr. Maria João Sequeira

Senior technician and policy analyst at the Portuguese Foundation for Science and Technology

(Fundação para a Ciência e a Tecnologia - FCT)



Quote from Portugal

It is well known that R&I systems can only grasp their full potential, in terms of knowledge base and knowledge uptake by innovation, if all the qualified human resources are on board, contributing to the demand and supply side. Women are an integral part of the highly qualified resources.

According to She Figures 2019, the share of tertiary educated population is gender-balanced in the EU (53.7%), while women were less represented among employed scientists and engineers (41.3%). Further women are significantly under-represented in entrepreneurship activities in technology-oriented fields. In Portugal, the proportion of women researchers is 42,5% in 2020, among the highest in EU, but their underrepresentation in the top levels of academic careers and in institutional top management positions is still a fact.

Three dimensions may converge to overcome the current sub optimal balance in science, technology and innovation: i) more gender sensitive funding processes, namely with balanced representation of female peer reviewers since assessment is increasingly at the core of the research system, with wide reaching impact; ii) integration of gender dimension in the research content, stimulating awareness on potential gender perspectives of non-necessarily gender focused research, reflecting multi, inter- and transdisciplinarity, also allowing to identify and measure new knowledge and scientific synergies on gender issues; iii) gradually introducing the gender dimension into the general organisational culture namely by implementing Gender Equality Plans (GEP) in RPOs (and in RFOs as well) as an eligibility criterion for funding, acknowledged as a catalyst for institutional change, thereby paving the way for a robust gender balance.

These dimensions will certainly determine the dual path of researchers and research building up a healthy and science effective community.



Prof. PhDr. Alexandra Bitušíková, PhD.

Head of University Center for International Projects, Slovakian representative of the former Standing Working Group on Gender in Research and Innovation

© Katarína Koštialová

I am delighted to see changes in our RPOs thanks to the Horizon Europe's requirement to prepare and implement Gender Equality Plans. It is also promising to see the involvement of one of the RFOs (Slovak Research and Development Agency) in the GRANTED project mapping the gender bias in research funding in Europe. I hope this was the first crucial step, which needed to be taken, and it will be followed by other RFOs. R&D is a complex system. For its transformation, applying measures only in RPOs is simply not sufficient. Excellent science requires excellent researchers and these need and deserve excellent working conditions. GE is an important part of it.





OT CONCEPTS **THEORIES** STRATEGIES



What makes co-produced gender equality knowledge so special?

> Why is it important to unmask delegitimating strategies against gender equality policies?

> How can promoting gender-equal decision-making bodies gain more traction?

Co-producing gender equality knowledge the CHANGErs' approach

Introduction

hen we started the Horizon 2020-funded project "CHANGE" in 2018, four years seemed like plenty of time to set up gender equality plans (GEPs) in five research performing organisations (RPOs), create networks to stakeholders in further RPOs and research funding organisations (RFOs) in all our seven participating countries, gather empirical data, and actually change processes and practices by co-producing gender equality knowledge. And we succeeded, however, clearing up the following questions ahead of time would have made our project even more efficient and effective. This is the purpose of this chapter, to answer the following: What do we mean by stakeholders? And how does co-producing knowledge actually work in practice?



Anita Thaler IFZ - Interdisciplinary Research Centre for Technology, Work Culture © IFZ



Jennifer Dahmen-Adkins **RWTH Aachen University** Institute of Sociology



Sandra Karner IFZ - Interdisciplinary Research Centre for Technology, Work Culture © IFZ

The observations we provide here are aimed at helping other RPOs and RFOs implement GEPs at their own institutions. We will explain all that in this chapter, and we will reflect on what worked really well and what we would do a little differently next time. What we definitely would change, if we could, is to skip a pandemic, which put several activities on hold, delayed a lot of processes and certainly shifted attention away from gender equity. However, it also had one bright spot, namely that it made us all online-workshop pros (Thaler et al. 2020). On the upside, since the beginning of 2022, the European Commission made GEPs an eligibility criterion for their new research funding programme Horizon Europe, this gave all the participating RPOs and RFOs Europe-wide an incentive to implement GEPs and participate in CHANGE's activities. This is what we refer to as a 'window of opportunity'.

But now, let's take a closer look at CHANGE and the people who made this co-production of gender equality into reality: the CHANGErs.

The CHANGErs' approach

CHANGE aimed at tackling two major problems we had identified as big hurdles while implementing prior gender equality plans (GEPs) in international structural change projects (see Dahmen-Adkins et al. 2019):

The research-to-practice gap (e.g. discussed by Roxborough et al. 2007) respectively knowledge-to-action gap (see e.g. Strauss et al. 2009), which describes how academic knowledge and research outcomes are not always valued as relevant for practice and consequently not acted upon. CHANGErs tackled this issue by integrating relevant actors and stakeholders from the beginning of the project and co-produced gender equality knowledge together, and thus came up with practical knowledge, which was and is relevant and meaningful for the respective actors in RPOs and RFOs.

In previous EU-funded structural change projects, it became evident that one reason for problems in institutionalising gender equality is the so called "conflict of knowledges" (Albenga 2016: 140). We identified this as a sort of 'academic feminist fightclub' issue (Thaler 2019), which fuels resistance within processes and organisations, and thus again hinders the transfer of research into practice. We saw these as main reasons why so many past projects wanted to 'fix the women' rather than 'fixing the system' (Schiebinger 2008). In CHANGE we tried to overcome those power issues by integrating **Transfer Agents** (TAs)¹, and later further stakeholders from RPOs and RFOs in the project consortium to build regional communities of practice (CoPs)².

How did we co-produce gender equality knowledge?

Practices of knowledge co-production among CHANGErs – in their organisations and with their national stakeholders - might have been diverse, but the overall goal was always to value different types of knowledge and establish a mutual understanding, to learn from each other and come up with 'customised knowledge' relevant for specific contexts. Within the CHANGE project, we did this by building on iterative learning cycles of communicative interaction, action and reflection, which required time and intermediated social spaces to offer room for tailored interaction and for planning the actual implementation of gender equality activities over a period of four and a half years³.

We divided our project into five phases (see more details in: Dahmen-Adkins et al. 2019), with the fifth continuing even after CHANGE had ended – another beauty of involving TAs, they are still working in the organisation today, ideally committed to gender equality. These were the phases of CHANGE, and we, the project coordinating team, recommended them to all organisations implementing GEPs, as they worked really well. Especially important: having a rapid action phase to generate short-term wins is crucial. Quick wins motivate people and give something back to organisations. This is how they see that CHANGE is actually happening, so do not forget them!



Institutional gender benchmarking and awareness raising phase

Feedback and planning phase

Strategic action phase

Sustainability and knowledge transfer phase

Graph 1: Phases of CHANGE

Throughout all these phases of CHANGE, knowledge co-production took place across several levels: within the project consortium, within the GEP-implementing organisations, in the regional CoPs, with an international expert community, our advisory board, with EU-funded sister projects. And how and when did we co-produce knowledge?

- At the **consortium level** mostly at in-person meetings⁴ every six months. However, CHANGE meetings were certainly different from other EU project meetings: we designed interactive workshop formats⁵ where partners shared their knowledge (e.g. specific contextual conditions influencing GE, experiences with resistance, etc.), reflected on what was shared, got inspired by others' ideas, and gave feedback. Finally, concrete next steps were further elaborated based on the discussions, either at the consortium or at the organisational level.
- At the consortium+level, our dedicated advisors offered constructive criticism, especially in relation to the design and implementation of the GEPs, on a regular basis⁶. This regular involvement of external experts provided the core project team with room for improvement and reflection, notably since we managed to build a trusting relationship where critical or frustrating aspects could be discussed openly and frankly.
- At an organisational level, each GEP-implementing partner involved Transfer Agents (TAs, e.g., human resources managers, heads of institutions or equal opportunity officers; see Thaler 2016 and Thaler & Dahmen-Adkins' chapter in this book) in active and continuous collaboration by creating GE committees or sounding boards. At this level, it is important to specify a vision for the GEP: What is it what we as an organisation want to achieve? For instance, "becoming a good working environment for all employees (regardless their gender, background, care responsibilities, sexuality, etc.)" can be a good translation of gender equity, where people feel personally affected.

In addition to TA engagement during the strategic action phase, it was key to involve other organisational stakeholders. They brought in diverse ways to address given shortcomings, and thereby generated more reliable, representative and feasible routes to tackle the specific organisational challenges. The inclusion of diverse organisational actors increased the potential to co-produce knowledge that actually translated into actions and changes in institutional decision-making and policies.



Quick wins motivate people ... they see that **CHANGE** is actually happening, so do not forget them!"

- At a regional or national level, each partner included further stakeholders from science and research (e.g., policy-makers, research-funding actors) and established multi-actor communities of practice (CoPs) from RPOs and RFOs in each CHANGE country to compare notes and learn from each other (e.g., about the structure of the various GEPs, the institutionalisation of transfer agents, recruitment and retention activities, etc.), but we stayed flexible and open wherever country and organisational specifics required it (e.g., salary schemes, parental leave, work-life-balance measures).
- At a European level, we have established and maintained close contact with our sister projects, i.e., GEP projects also funded under H2020. This supported cross-project exchange and synergy, including, among other things, joint conferences, joint sessions at conferences, joint publications, mutual support in awareness campaigns and mutual invitations to give presentations at workshops. This aspect is also so important, because, in addition to networking, information on (socio-)political developments relevant to gender equality projects is discussed and passed on in such formats and venues.

¹ Transfer Agents are institutional actors with power (management level), who are committed to gender equality (Thaler 2016).

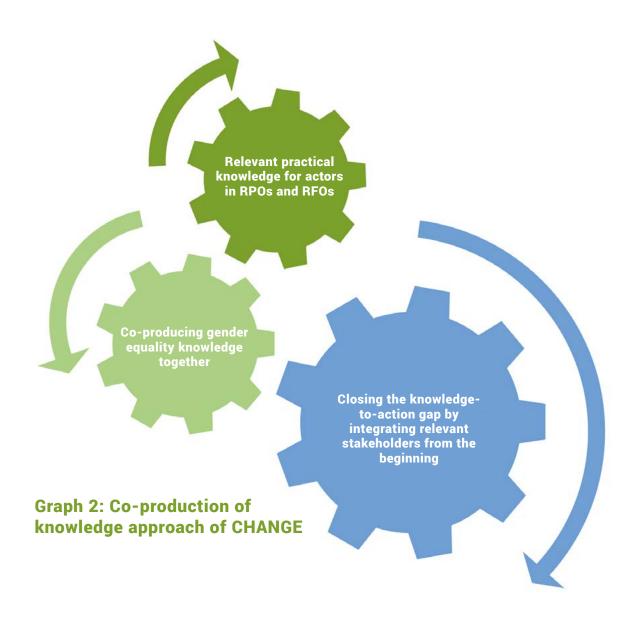
² The idea of knowledge co-production and building CoPs had been tested in knowledge brokerage and RRI projects, where it has proven to be a successful strategy for enabling structural change (cf. Karner et al. 2011, 2014; 2016).

³ Due to the pandemic the project was prolonged by half a year.

⁴ We held in-person meetings from 2018 to 2019, had to pause them in 2020 and 2021 (where we did elaborate online meetings instead, see Thaler et al 2020), and started with them again in 2022.

⁵ For a comprehensive description, see the project deliverable D2.4 Workshop Design Collection.

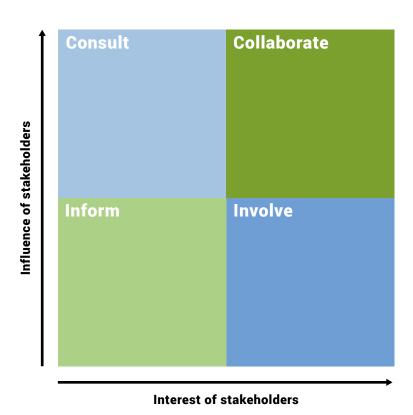
⁶ We would like to take this opportunity to deeply thank our advisors for their time and commitment during the project duration: Zoltán Bajmócy (University of Szeged), Andrew Dainty (Manchester Metropolitan University), Marcela Linkova (Czech Academy of Sciences), Pat O'Connor (University of Limerick), Tatjana Parac-Voqt (KU Leuven), Sanja Vranjes (Mihajlo Pupin Institute), and Angela Wroblewski (Institute for Advanced Studies).



How did we find the stakeholders for relevant knowledge co-production?

In order to determine who should be meaningfully involved in a participation process, we mapped out who the stakeholders might be and updated it regularly. This usually begins with the creation of an initial list of potential stakeholders, ranging from experts and actors in RPOs and RFOs to policy-makers, journalists, educators, etc.

The next step is to assess the people collected in our list (or table) described above in terms of their influence on the project and their interest in the matter (the actual "stakeholder mapping"). To do so, either the names of the stakeholders or their initials or numbers assigned to them are placed in a coordinate system corresponding to their potential involvement.



Graph 3: Visualisation of a stakeholder mapping

A stake is a gauge of how motivated someone is to participate in a development process and to what degree and for how long. This interest, in turn, depends on resources (e.g., how much time is needed) and whether participants can benefit in some way (e.g., by getting early access to information about research funding). Stakeholders' influence depends on their position and the extent to which they also represent the interests of others (e.g., gender equality and inclusion officers) or act in a multiplier function via the organisational hierarchy (e.g., managers, personnel developers).

Positioning the stakeholders within the two dimensions of interest and influence reveals how they can be involved in the process to the greatest effect. This results in four levels of participation (see graph 3):

- People with low interest and low influence are informed regularly about the (e.g., GEP implementation) project. This can be done via employee meetings, direct written messages (e-mails, etc.) or as communication to an entire organisation or project group (short explanatory videos, newsletters, notices, etc.). It is always important to name specific contact persons from whom further information can be obtained, as well as to refer to the entire process (who does what, when and why?), i.e., to communicate in a comprehensible and transparent manner.
- Stakeholders who have a lot of influence in an organisation (like TAs) or as policy-makers but little time (which also translates into interest) to participate in long-term processes should be consulted at regular intervals and their advice sought; this can take place in structured discussions (e.g., expert interviews).
- People who have little influence but a great interest in participation should be actively involved (e.g., through surveys, organising workshops or informal activities, etc.).
- The last group of stakeholders, whose interest and influence are both relatively broad, is the group from which the actual participants for the actual process of knowledge co-production should be selected. These are the people who should 'have their say', because they have a multiplier effect in the organisation/the project through their influence. In addition, their interest in the topic in general and in the participatory process in particular helps to ensure that the project topic will live on, even after the project has ended.

How can we make CHANGEs last?

Implementing a GEP is not a short-term undertaking, and it is certainly not finished when the document with all the planned activities is finally written. In other words, a GEP is a marathon, not a sprint. This is why a main goal of CHANGE was to offer sustainable support.

We could say that according to the EC's first of four procedural requirements - that the GEP must be a public document signed by top management with clear objectives and detailed actions - a certain reliability is already built in (European Commission 2021). However, while the involvement of management level is certainly crucial for setting up a GEP, we learned in CHANGE that it needs more than just a signature from the top; there has to be a commitment to the cause, the will to spend time and fight for gender equity. This is why we included TAs and recommended this role as a support and sustainability factor for the GEP implementation to all our RPOs and RFOs participating in the various CHANGE COP activities (see Thaler & Dahmen-Adkins in this book). Another process requirement for GEPs defined by the EC concerns the monitoring of the implementation steps and developments. Monitoring and evaluation should be considered integral to the change process in an organisation and thus in the GEP itself. The allocation of sufficient resources is crucial to sustainable GEP implementation measures, but further resources must also be set aside for monitoring activities as well (Dahmen-Adkins & Peterson 2019). Further monitoring should be also understood as a chance to improve your work as it offers the possibility to respond quickly to changes related to organisational circumstances with corrective actions and helps to reflect on institutional processes.

And a GEP cannot be implemented without having the broad support of the whole organisation; this means it also needs a bottom-up approach. This is why all CHANGErs raised awareness and made sure that relevant co-produced gender equality knowledge was transferred across their institutions. Additionally, through capacity building and networking with national stakeholders, all CHANGErs became regional or even national resource centres for providing gender equality knowledge and expertise for other RPOs and RFOs. This can be seen in this handbook - all CHANGErs contributed with their gender knowledge, their GEP experiences and their networks. Most of the CHANGErs had no expert gender knowledge in 2018, but through more than four years of knowledge co-production, mutual learning and continuous networking, we built several communities of practice (see example of the German CoP in this book) to support and mentor others, and to go on co-producing gender equality knowledge even after the project ends.

Looking back, we are deeply grateful for this four-and-a-half-year-long journey with all the great people we met and who shared their experiences and their knowledge with us. We want to say thank you to all CHANGErs, who became friends, as we did not only share these four-and-a-half-years – plus years of preparing this proposal, getting rejected and proposing again - but personal and job-related stories of frustration and loss, successes and love. We believe in all of you, you've already achieved a lot, and we are sure you will go on, because "... we are the CHANGErs, my friends ...!" 7



Implementing a GEP is a marathon, not a sprint. This is why a main goal of CHANGE was to offer sustainable support."

⁷ At our consortium meeting in October 2019 Queen's "We are the champions" became our hymn, we just had to change a few words and it worked perfect for us.

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Gender Equality Plan Implementation in RPOs - how to establish the legitimacy of the case for change?

Introduction

he idea of meritocracy is firmly anchored in scientific organisations. It means that "merit or talent is the basis for sorting people into positions and distributing rewards" (Scully 1997: 413). Accordingly, in research performing organisations (RPOs), the commonly held assertion can often be found "that in true meritocratic systems everyone has an equal chance to advance and obtain rewards based on their individual merits and efforts, regardless of their gender, race, class, or other non-merit factors" (Castilla and Benard 2010: 543). Consequentially, common responses to gender inequalities in RPOs typically frame the issue as something women must address on their own – as their responsibility – or as a meritocratic 'non-issue' altogether. In the latter case, it is argued that inequality exists due to women's tendency to choose less demanding education and career trajectories. Thus, so-called meritocratic attitudes and discourse strategies are a central factor in delegitimising activities that would promote gender equality (Hardacre and Subašić 2018). Moreover, Castilla and Benard (2010) have also found that organisations emphasising meritocracy as an organisational value used to reward employees fairly often show just the opposite results. They call this phenomenon the "paradox of meritocracy" and explain it by citing the activation of stereotypes and other work-irrelevant factors of managers who employ merit-based reward practices. So, what can be done to legitimise gender equality policies and activities in RPOs? I explore this question by first analysing what this means for researchers in the RPOs – both for those who evaluate merit and talent as well as for those who are evaluated in this regard. Then, I look at the organisational level and ask how legitimacy for the case for gender change is established at the level of RPO management.

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RPOs typically frame the issue as something women must address on their own ..."

Establishing the legitimacy of the case for CHANGE on individual level

For the most part, professors are responsible as gatekeepers for the development of early career researchers (ECRs) (Hüther and Krücken 2018: 148ff., 195 ff.). Who is considered worthy of promotion by the gatekeepers is based on their assessment of whether someone has already been able to demonstrate the talent and potential for a career in science. These value judgements are thus subjective and susceptible to bias. However, most of the gatekeepers see themselves as unbiased, fair and objective evaluators. But in the context of RPOs with meritocratic values, it is more likely the case that they behave in biased ways due to stereotype activation (Uhlmann and Cohen 2005, 2007). Uhlmann and Cohen (2007) also note that the self-objectivity effect on hiring and promotion bias may be weaker when there is high accountability. Yet, the promotion of ECRs in many RPOs is



largely based on informal (promotion) relationships, although there are more or less pronounced formal requirements for the recruitment and promotion of scientific staff at the RPOs (Wolffram et al. 2014, O'Connor and Lopes-Montez 2022). Accordingly, the development of ECRs based on the discretionary decisions of gatekeepers and the accompanying social relations shaped by informal practices is seen as having great legitimacy in science careers. These social relations are, however, often accompanied by homosociality, defined by Lipman-Blumen (1976) as a nonsexual preference for members of one's own sex that promotes distinctions between women and men through segregation in social institutions.

In contrast to the informal and thus less visible promotion and recruitment relationships, large parts of the scientific community seem to reject the institutionalisation of a culture of gender equality accompanied by activities to promote it –although these are open and visible processes. As outlined, these are mostly seen as illegitimate promotions of women that endanger the purportedly meritocratic science system. The contradictory nature of discourses about these practices becomes clear in their juxtaposition, revealing the "limits to meritocracy" (Nielsen 2016). Individual relationships of ECRs with senior researchers as powerful people who affect their recruitment and promotion actually represent a kind of nepotism, which is generally discredited in academia. Yet, these relationships have gained legitimacy through re-branding as talent management and sponsorship (de Vries & Binns, 2018, Montes Lopez & O'Connor 2019). This "mentorship" is supported by a moral discourse of responsibility that oblige senior researchers to use their own power and influence to support the careers of their ECRs for whom they are responsible (cf. Montes Lopez & O'Connor 2019). Even gender equality policies aimed at equal access to such relationships, however, although helpful to individual women, maintains nepotism in academia (O'Connor and Barnard 2021: 50).

Thus, it is important to generate public recognition of the continuing failure of RPOs to create more gender equitable workplaces and career opportunities. But this is not an easy undertaking. Since RPOs are "micropolitical arenas" (Dovifat et al., 2007), such approaches are not accepted by all without resistance. It is usually more convenient for gatekeepers to make own discretionary decisions (Husu, 2004) about who is recruited, given a permanent position, judged as excellent and promoted.

Accordingly, gender equality officers and other change agents (GECAs) must expect resistance practices and discourses that aim at delegitimizing gender policies and activities: they may face a mirage of equality being erected (Peterson et al. 2021: 33, 37) or gender inequality getting downplayed or denied as a problem. Moreover, women who engage for gender equality are often accused of promoting their own self-interest (de Vries, 2015). Such strategies aim at weakening the role and eligibility of the GECAs and mitigate their change message. As a consequence, this can lead to gender inequality going unnoticed for people in position of power in the RPOs (Peterson et al. 2021: 33f).

In simply pointing out the above-outlined contradictoriness and delegitimating strategies against gender equality policies and activities, a gateway to legitimising the case for change for gender equality could open up. Because in making



It is therefore essential to sensitise gatekeepers in RPOs ..."

them visible, this can increase the perceived injustice of gender inequality in RPOs. Research has shown that such a perception is an important predictor of engagement against gender inequality. The more one perceives gender inequality as unjust or illegitimate, the more likely one is to engage in collective action and take real responsibility, and vice versa (van Zomeren et al., 2008, cited in Hardcare and Subašić 2018: 6).

Furthermore, "organizational policies aimed at increasing transparency and accountability in recruitment and promotion decisions have been shown to reduce the expression of individual bias" (Castilla and Benard 2010: 569). It is therefore essential to sensitise gatekeepers in RPOs to the drivers of male preference, repeatedly, and to make them aware of the contradictions and unequal opportunities that arise from this.

Establishing the legitimacy of the case for CHANGE on organisational level

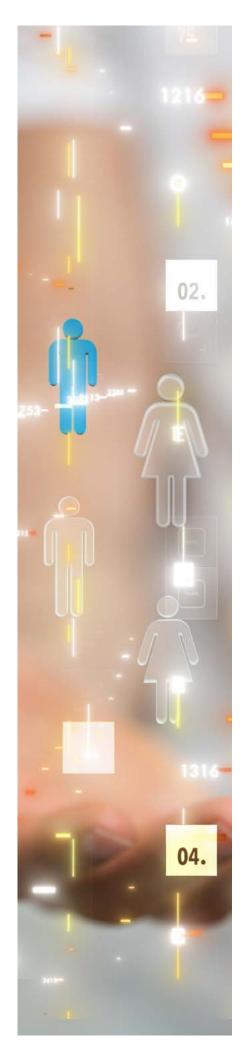
At the level of RPO management in its function of governing higher education and research and innovation policy, other and more positive discourses of legitimacy production have been available to gender equality plans (GEPs), since with the transformation to neoliberal organisations (Weber 2017) in higher education, a RPO has had to be measured more strongly in comparison with competing RPOs. Here, however, the findings are ambivalent. Some empirical studies have found, that workplace inequality persists with the adoption of affirmative action and diversity policies (Kalev et al. 2006, Kalev 2009). From a neo-institutional perspective, it can be argued that organisational practices are also adopted for symbolic reasons and consequently do not always achieve their stated goals (Stinchcombe 2001; Sutton et al. 1994). In contrast, another study that examined the relationship between the proportion of female professors at German universities and their further development concluded that the higher the proportion of female professors at a university, the lower the further growth in the number of female professors, and vice versa. In this study, the findings are also explained with a neo-institutionalist approach. Thereafter, however, universities have systematically tried to increase their share of women in order to fulfil environmental expectations and thus secure their legitimacy (Hüther & Kirchner 2018). Yet, the finding also shows that safeguarding legitimacy is not aligned with political targets, such as a target quota of e.g. 40% women, but with the average share at universities.

These findings illustrate that the legitimacy of the case for change to address gender inequalities in RPOs is not recognised by many researchers. The reason for this is that, on the one hand, the idea of meritocracy as a distributive mechanism resting on equal opportunity and merit has broad cultural appeal (McNamee and Miller 2004). On the other hand, the self-reflexivity towards one's own stereotypes, biases and blind spots in action is missing. At best, the case for change at the level of higher education policy governance is oriented toward the base minimum standard, i.e., being no worse than average. Thus, the status quo is maintained in RPOs through the broadly shared idea that these organisations are indeed gender-neutral meritocracies. The need for action to promote gender equality is usually measured only in terms of the proportion of women. Accordingly, activities to promote gender equality at one's own RPO are seen as illegitimate preferential treatment of women, at least whenever the proportion of women, e.g., in professorships or other leadership positions, is no worse than the national average.

It is therefore essential to raise awareness for gender equality beyond counting heads for fair and transparent recruitment. Furthermore, funding decisions of ECRs that also include the contextual conditions of performance achievement must be scrutinized. How excellence is often used as "legitimating discourse" (O'Connor and Barnard 2021: 48) for safeguarding the status guo must be called into question. Linked to this discourse is one that shifts responsibility for the underrepresentation of women, particularly in professorships and leadership positions, and places it outside the structure and culture of science. Consequentially, rather than counteracting the culture of informal selection and promotion practices, measures are often pursued to reconcile work and family care responsibilities. Accordingly, these measures find a comparatively high level of acceptance in RPOs. They place the responsibility outside the system, and the compatibility problem remains largely with women, which frames them as "others" in the science system. Nevertheless, this is a starting point to begin discussing and questioning the prevailing scientific culture responsible for masking the informal recruiting and promotion practices that systematically disadvantage women based on individual gatekeepers trusting and recognising ERCs due to their discretionary decisions. However, recent research on informal relationships in science also suggests that a greater awareness of its legitimacy in science careers has now emerged with respect to informal funding relationships. For example, in the study by Wolffram et al. (2020), some of the stakeholders in management as well as gatekeepers now made a very clear distinction between legitimate (professional support and advice, career planning) and illegitimate recruiting and promotion practices (sponsorship). These findings signal that the long-standing and consistent translation work of gender knowledge into organisational governance discourses has not been entirely ineffective. It re-positions gender policy change away from being women's problem and women's work. And it places responsibility and accountability for the change with those who have positions of power, who are admittedly mostly men.

Conclusions

The status quo is maintained in many RPOs through the broadly shared idea that these organisations are gender-neutral meritocracies. The need for change regarding gender equality is usually measured only in terms of the proportion of women on staff. Accordingly, measures to promote gender equality are often seen as illegitimate preferential treatment of women in RPOs, at least whenever the proportion of women, e.g., in professorships or other leadership positions, is no worse than the national average. In contrast,



careers in science are also significantly developed through informal social relationships and support structures and practices (Wolffram et al. 2020, Yarrow 2020). Gatekeepers in science and research organisations are apparently granted the essential competence of recognising performance, talent and future potential in young scientists and determining their further promotion on the basis of discretionary decisions. Since this recognition is based on preconditions, equal opportunity officers try to sensitise gatekeepers to the risk of bias, subjectivity and other factors influencing value judgments. However, the insight into these weaknesses does not necessarily lead to a higher acceptance of gender equality activities or to an understanding of one's own responsibility for ensuring equal opportunity careers in science. Linked to these practices are micro-political struggles between formally regulated procedures and informal practices. While the former are supposed to guarantee equal opportunities by ensuring transparent and well-founded decisions, the informal practices of the gatekeepers are derived from a traditional scientific culture that has systematically favoured men due to gender-segregating and hierarchical patterns of societal allocation.

Thus, what can be done to counter resistance and raise awareness of the need for gender change?

- Individual level: It is important to sensitise gatekeepers to bias and illegitimate informal promotion practices of ECRs through sponsoring on the base of discretionary decisions. The more members in RPOs perceive gender inequality as unjust or illegitimate, the more likely they will engage for gender change in their organisations.
- Individual and organisational level: It is important to generate public recognition of the continuing failure of RPOs to create more gender equitable workplaces and career opportunities. Thus, it is essential to re-position gender change away from being the women's problem and position it as an organisational problem, which means "fixing the institutions" instead of "fixing the women". However, to call for management's engagement and therefore mostly men's engagement as the "cure-all" would be too simplistic, if disconnected from gender scholarship (de Vries 2015: 22).
- **Organisational level**: It is crucial to use expert and scientific gender knowledge (Thaler 2019) in the RPOs. It is an important for GECAs to have legitimation strategies at hand and essential for the implementation of gender equality activities that they are accompanied by such strategies. This means that GECAs must strategically address the need for increased gender awareness in their RPOs in order to reach agreement on credible problem definitions, the goals to be achieved, and the organizational strategies and actions appropriate to achieve them (Peterson et al. 2021: 33-35).

In conclusion, it can be noted that the institutionalisation of a culture of gender equality increases the legitimacy of the case for gender change.

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Strategic Actions to Influence CHANGE in **Gender Institutional Norms in Decision-Making Bodies and Processes**

ender equality is one of the 17 sustainable development goals adopted by all United Nations Member States in 2015. But there are important differences on the way countries all over the world have been trying to improve gender equality (Mastracci, 2017; WEF, 2021). Northern European countries seem to be those who have been able to improve gender equality faster and most consistently (WEF, 2021). Since the end of the 1990's, Nordic countries introduced centralised, state-driven interventionist approaches to gender inequality, adopting affirmative action in HEIs. Although relevant, these measures were not enough to promote a sustainable equal participation of women in decision-making in academia. In this contribution, we propose several strategic actions to ameliorate the implementation of such measures to the greatest effect. It is undeniable that gender awareness has been increasing in higher education throughout Europe, in a great extent due to the fact that the European Commission has put it on the political agenda (EC, 2021).



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The use of the knowledge economy and society as a political tool to improve European integration (Chou & Gornitzka, 2014) led to the creation of the European Area of Higher Education and to a clear focus on the relevance of higher education to improve innovation, economy and society. In 2005, the Council of the EU invited Member States to increase the number of women, particularly in leadership positions, in the public sector and industrial research and technology (Council of the EU, 2005). Later on, the Council recommended the development of targets for gender balance among professors (Council of the EU, 2015). And, more recently, the European Commission designed the Gender Equality Strategy (2020-2025), which emphasises the need to bring forward inclusive and diverse leadership (European Commission, 2020).

Based on these initiatives, it is possible to state that the European Commission emphasises not only the need to develop initiatives to improve gender equality in higher education but also to assure its monitoring. To comply with this requirement, the EC has been publishing a report on the situation of women in higher education since 2003 the SHE Figures. The analysis of these reports allows one to conclude that important progress has been made. For instance, there are more female students and teachers in all countries, leading to the emergence of the idea of a feminised future (Leathwood & Read, 2008).



Nevertheless, there is a persistent inequality that seems to be common to all countries as well, even those who have adopted affirmative action plans earlier on. This is mostly due to the lack of women in decision-making positions. In fact, one can say that there is a universal absence of women in senior posts in higher education and, particularly, in decision-making positions (Morley, 2014; O'Connor, Carvalho, Vabø, & Cardoso, 2015). All over the world, higher education institutions (HEIs) operate in culturally male-dominated structures and within a culture where the dominant model of masculinity prevents women from reach formal leadership positions.

The lack of women in power positions is common to all spheres of life, in policy, in business, in sports and even in non-profit sectors. The phenomena of under-representation of women in professional groups or sectors at the top is known in the literature as vertical segregation. Various authors recognise that the causes of vertical segregation in academic careers are multiple, complex and intertwined. Nevertheless, the distinct factors can be aggregated in three main topics: the social, cultural and political environment, the institutional culture and also the personal factors.

Concerning the social, cultural and political environment, all GE authors recognise the relevance of the gender stereotypes that dominate in patriarchal societies; these attribute distinct roles and attributes to women and men. Based on these stereotypes, there is also a traditional social division of work - with men more associated with activities in the public sphere while women are expected to keep their activities to the private domain. The responsibilities women assume in the private domain, especially concerning caring roles, increase their workload on the whole and present a more challenging work-life balance (Cubillo & Brown, 2003; Diogo, Jordão & Carvalho et al., 2021; Maheshwari, 2021; Etzkowitz & Ranga, 2011; Utoft, 2020; Caprile et al., 2011).

Within the context of higher education institutions, institutional culture plays a special role. At the institutional level, there is a gendered division of academic work, with women more concentrated in teaching and pastoral activities with students, while men tend to be more concentrated in research and in management activities. Top jobs and management positions tend to be associated with the dominant (and often a toxic form of) masculinity, although there are distinct aspects of masculinity. Furthermore, there is a general tendency for selecting people with similar characteristics to work with, a phenomenon known as homosociability (Holgersson, 2013).

The informal side of the institution is equally relevant in gender (in)equality. Men in powerful positions tend to work together but also to share activities outside their HEIs - activities that sometimes exclude women. These tendencies make up what is known as a "good old boys" network.

In recent years, HEIs' masculine culture seems to be reinforced due to neoliberalism, and the influence of New Public Management. According to Lewis Coser higher education institutions became "greedy institutions" in that they induce their members to grow increasingly competitive, using non-physical mechanisms to cultivate voluntary compliance weaking their ties with other groups external to

the institution (Benschop & Brouns, 2003; Bain & Cummings, 2000; Jackson & O'Callaghan, 2009; Carvalho & Diogo, 2018). These culture characteristics may have a negative impact on women since they are more socially expected to be more engaged with activities out of the academic environment.

Often self-inflicted stereotypes associated with women's personality – supposed lack of confidence, fear of failure, disappointment with the working environment, and pressure from colleagues and family – also get pointed out as unconscious yet relevant factors that do indeed create obstacles to women's participation in top positions (Maheshwari, 2021).

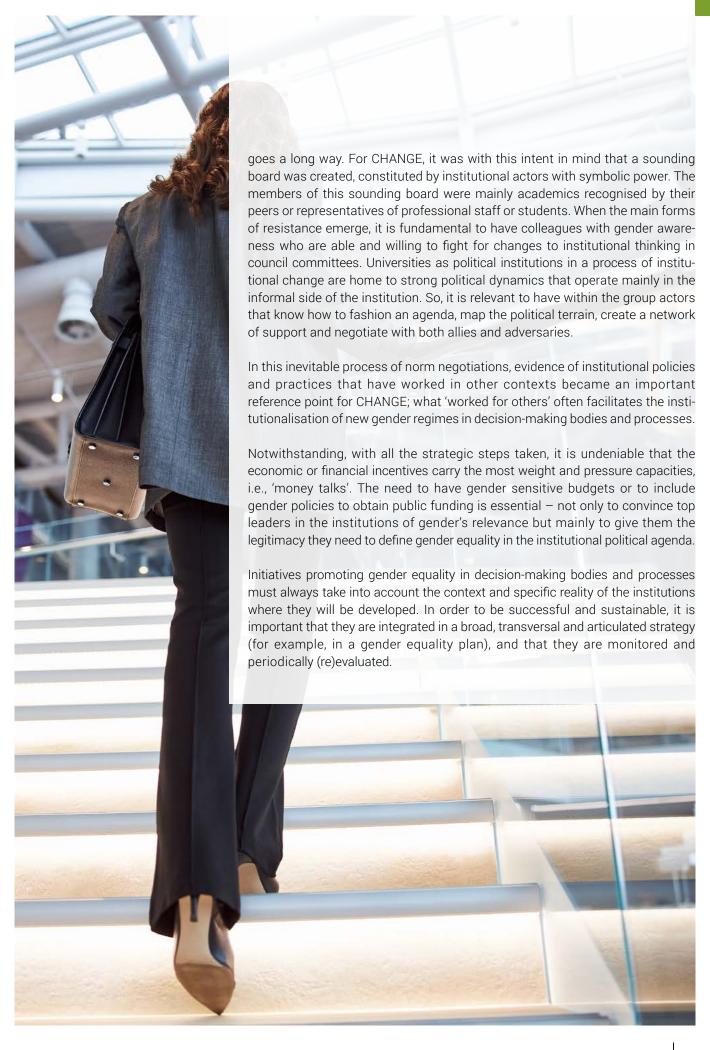
Despite all these findings, the relevant studies and ample empirical evidence, the gap between knowledge and practice persists. A constructivist account of the process taken to persuade key actors within a HEI would be to first persuade the top actors of the topic's relevance and, afterwards, to create and internalise new norms.

Changing norms regarding gender is always challenging, and those with institutional power are crucial for promoting transformation (O'Connor, 2020). Although the literature already acknowledges the relevance of evolving key actors in the institutions (Morley, 2013; 2014), it is still unclear how to best convince decision-makers of the relevance of gender equality in top decision-making. What seems to be missing are sustainable actions and good practices that have the power to increase women's participation in decision-making (Dahmen-Adkins, Karner & Thaler, 2019). The process developed in the CHANGE project was based precisely on some strategic steps that can be applied – not just for gender balance in HEIs but also in other socio-organisational contexts.

First, it is important to introduce the topic in the agenda at relevant moments, i.e., find the 'windows of opportunity' (Dahmen-Adkins, Karner & Thaler, 2019). For instance, in all the processes/phases of elections for the governance bodies, it is relevant to raise the issue. This strategy enables not only increasing gender awareness among the candidates but also, and most importantly, inducing public commitment by the potential winner to develop mainstreaming policies to improve gender equality along his/her mandate.

Highly important is the presentation of evidence. In trying to raise gender awareness amongst those who have institutional power, it is fundamental to be aware of the scientific knowledge produced about women and power in higher education institutions. To know what are the main social processes leading to gendered organisations and, more specifically, to fewer women in top positions is essential to deconstruct arguments based on so-called 'common sense'. Furthermore, it is also important to have a clear notion of the institutional situation, i.e., quantitative evidence on the gender composition of all the governance bodies in the institution.

However, even when confronted with quantitative evidence, key actors may still struggle with internal resistance to imposing a gender equal agenda. A focus on strategic negotiations is therefore needed to accomplish a process of change. To do so, identifying relevant actors in the institution with gender awareness



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Causes and Consequences of Biases and (Gender-) Stereotypes

Equal qualification, unequal treatment: introduction

hether you want it or not, biases and stereotypes influence your perception, your decision-making and your behaviour. They affect where you feel secure, why you choose one item over another and to whom you smile. Sometimes biases and stereotypes have no negative consequences. At other times, however, their ramifications are massive and unwanted. Keeping an eye on the influence of biases and stereotypes, and creating a system to counteract them, is one of the key tasks when it comes to realising gender and social equality in organisations.

In a recent study, social psychologists sent CVs to 251 professors of physics and biology with a request to assessment the applicants (Eaton et al., 2020). The CVs for each discipline were almost identical and differed only in the candidate's names, which indicated different genders and races. Overall, female-named post-docs were evaluated as more likable, but less competent and less hireable. Applicants of apparent Asian descent and white applicants were rated as more competent and desirable than seemingly Black and Latino post-docs. Thus, although each candidate was equally qualified, they were evaluated differently based upon their gender and race. Discrimination against applicants based on distinctive characteristics is a finding that is demonstrated in experimental studies on a regular basis (e.g., Moss-Racusin et al., 2012; Steinpreis et al., 1999).

Knowingly and unknowingly, intentionally or unintentionally, recruiters, human resource managers and professors apply stereotypes to job candidates. In doing so, they not only violate laws and potentially miss the opportunity to select truly the best applicants, but also further perpetuate discrimination against women, people of colour, LGBTQ* people, people with disabilities, people from low socioeconomic backgrounds, and many others who belong to one or several marginalised groups.

To understand why people, have biases and stereotypes, one must have a look at their function in the context of evolution.





The impressive processes with which our brain processes masses of information: heuristics

Over millions of years of evolution, our brains have learned to filter and prioritise the huge amounts of information that we take in with all our senses. Every moment approximately one million bits of sensory information are reduced to about 2 to 60 bits for attention, perception motion and decision-making (Wu et al., 2016). Furthermore, for the sake of efficiency, our brains use hardwired rules of thumb - so-called heuristics - that help "making decisions more quickly, frugally, and/or accurately than more complex methods" (Gigerenzer et al., 2011, p. 454). Heuristics are usually applied without any special effort or even awareness and help to make decisions based on limited data and in ambiguous or stressful situations. There are many different heuristics for which our brain has been preprogrammed in the course of evolution. Here are three examples:

- When athletes want to catch a ball, they do not sit down and calculate its trajectory. Instead, they start running keeping their eye on the ball. The brain tracks the angle of the eye, thus intuitively adapting their running pace to arrive at the ball's destination at the same time as it (McLeod & Dienes, 1996), a heuristic that can also be found in animals hunting prey (Gigerenzer & Gaissmaier, 2011)².
- The so-called scarcity-heuristic automatically leads people to believe that items they would like to acquire are more valuable, the more difficult it is to acquire them (Lynn, 1992). The scarcity heuristic is an important reason why many cultures ascribe a high value to diamonds and also why people were panic-buying and hoarding toilet paper during the Corona pandemic.
- The default heuristic leads people to choose pre-selected options, especially when the decision is not easy (Johnson & Goldstein, 2003). Therefore, in countries where you have to opt-out being an organ donor, the number of donors is significantly higher than in countries where you have to opt-in (e.g., only 12 % in Germany and 99.9 % in Austria).

Generally, heuristics are helpful and ease decision-making processes. However, they entail a certain probability of error. Particularly erroneous heuristics that lead to undesirable outcomes are called biases3.

 $^{^{1}}$ Heuristics can also be learned, for example, through social processes or explicit teaching.

² The exact heuristic people use is running "at a speed that [keeps] the acceleration of the tangent of the angle of elevation of gaze to the ball at 0" (McLeod & Dienes, 1996, p. 531). Due to the pandemic the project was prolonged by half a year.

³ In cases where the information is available, one can calculate the difference between the heuristic prediction and the true value as a statistical error parameter. This parameter is called bias as well and, together with the variance and the irreducible random error, forms the sum of the overall statistical error (e.g., Gigerenzer et al., 2011).

Small mistakes, big impact: biases

Some biases are more general in nature; other biases contribute directly to the lack of equality in organisations. What many of them have in common is that they occur without being noticed. Here are three prominent examples of biases:

- The anchoring bias (see e.g., Lieder et al., 2018) leads people to base their decisions on an early available reference point or "anchor". For instance, the first figure brought forward in a salary negotiation by one or the other party has a major influence on the final agreement. Also, vendors actively exploit anchor bias by placing a particularly expensive product of the same category next to a regularly priced one to make it appear to be a good deal.
- Research on the confirmation bias (see e.g., Oswald & Grosjean, 2004) states that we are attentive to information that confirms what we already believe. Confirmation bias affects our search for information, how we interpret this information and what of it we remember. This is not only relevant when we, for instance, look for information online, but also when we judge other people. For example, if we believe that a person is particularly disorganised, we are more prone to notice information that confirms this belief and to ignore contrary evidence.
- Affinity bias means that we prefer people who look, think and act like us. Affinity bias can be found at workplaces, where the people being hired or promoted are similar to those already there. In sociology, this tendency is referred to as homosociality (Hammarén & Johansson, 2014). Importantly, affinity bias not only influences major decisions, like whom to hire, but also gets expressed in micro-behaviours: for instance, we meet with people who are more similar to us more often, we show them approval through nods and smiles and approach them more frequently during coffee breaks. These seemingly harmless behaviours accumulate over time and contribute to the exclusion of people who differ from us, maybe just because of their skin colour, gender, age, social background or disability.

To date, almost 200 different biases have been discovered (see e.g., Wikipedia's "List of Cognitive Biases", 2022). Although and because it is normal for people to have biases, it is imperative that organisations change their policies and procedures in order to mitigate their potentially negative influences. This is especially true for stereotyping, which is also a biased heuristic, and strongly contributes to the exclusion of people with specific characteristics.



Keeping an eye on ... biases and stereotypes ... is one of the key tasks when it comes to realising gender and social equality in organisations."

We all have them: stereotypes

Stereotypes are pieces of information about members of certain groups. Like other heuristics, stereotyping is also evolutionarily hardwired. Whether we want it or not, we quickly and automatically judge others based on their apparent group membership (e.g., Anslinger & Athenstaedt, 2015).

The knowledge underlying stereotypes is culturally shared. This means that people in the same societies share mostly the same stereotypes about the same groups, because they have undergone similar socialisation, absorbing information from by relatives, peers, educational institutions and (social) media over the years.

The crux with stereotypes is that even if we don't fully agree with them, we might nevertheless use them to assess others. Especially in situations where we have limited information, we need to act quickly, we are under a lot of stress, or we simply do not have the cognitive resources or motivation to engage more deeply, we fall back on socially shared stereotypes (e.g., Kauff et al., 2021). Whether the content of these stereotypes is completely outside the stereotype bearer's consciousness, as was assumed for many years, has recently become a subject of dispute again (see Infobox on Unconscious Bias).

People have stereotypes about all sorts of groups, linking alleged characteristics to skin colour, ethnicities, age, sexuality, etc. In the following, we will take a closer look at gender stereotypes, as these influence the structure of our society from the ground up.

Infobox: Unconscious Bias - important, but only when treated right

Since almost three decades, social psychology assumes specific differences between so-called explicit and implicit stereotypes (Van Dessel et al., 2020). The idea is that the content of explicit stereotypes is consciously observable and easily accessible to the stereotype bearer, while implicit stereotypes are unconscious and difficult to access. Furthermore, there is evidence that the statistical correlation between explicit and implicit stereotypes is very low. These findings brought about the implicit assumption that people may not bear full responsibility for their discriminatory actions and prompted many organisations to implement so-called unconscious-bias workshops.

Recently, however, a number of research findings have come to light that are challenging the way we deal with unconscious bias:

- Many trainings which were designed to reduce unconscious biases have been shown to have little impact (FitzGerald et al., 2019). However, there are ways to do it right. An overview of what constitutes good training can be found in Schmader (2022).
- The so-called Implicit Association Test (IAT), a psychological measurement method on the basis of which many assumptions about the existence of (weakly associated) implicit and explicit stereotypes have been made, does not seem to measure what it claims to measure (psychologists call this lack of validity; Schimmack, 2021). Thus, one should be careful not to overvalue the importance of IATs results.
- Finally, the underlying dual-process model describing conscious and unconscious processes has undergone thorough re-analyses and criticism (Evans, 2019). This means that implicit stereotypes and biases may not be as inaccessible as originally thought. People seem to be able to consciously access them. However, whether they would admit this to themselves and others is another question. Trainings can help starting to openly reflect on any stereotypes and biases one may have.

Summing up, addressing unconscious bias is still relevant when done right, but can only be a starting point of challenging systemic inequality in organisations.

Ambitious men & kind women: gender stereotypes

There are specific stereotypes linked to men and women. In most cultures men are generally more associated with agentic traits like being assertive and ambitious, while women are more associated with communal characteristics like caring and warm-heartedness (Sczesny et al., 2019). While men and women do indeed differ in agency and communion (Hsu et al., 2021), research shows that these differences are not innate but socially acquired and change over time as well as depending on the context (Wood & Eagly, 2012).

Origins of gender stereotypes

The reason for gender stereotypes lies in the different social roles which are, and historically have been, occupied by men and women. For instance, seeing relatively more women working in the role of at home caregivers and more men working full-time, leads people to believe that men and women must be fundamentally different (Wood & Eagly, 2012). However, the division of men and women into breadwinners and housewives is historically rooted in women's higher reproductive activities and men's greater physical strength (Sczesny et al., 2019). Although both aspects are nowadays less relevant due to contraceptive methods and less physically demanding work, a division of labour remains, especially due to role expectations.

While there is evidence that competence-related stereotypes about women have changed due to their increased entry into male-dominated fields, a recent meta-analysis reports no change in women being perceived as less agentic and men as less communal (Eagly et al., 2020). This is probably due to the fact that women are more likely to work in communal jobs and men are more likely to work in agency-related occupations. Furthermore, the majority of care and household work is still being done by women⁴.

Consequences of gender stereotypes

The underlying causes of the following three phenomena are complex but can partly be explained by gender stereotypes which people apply to others as well as to themselves.

Horizontal segregation describes the previously mentioned fact that women and men choose different professions (He et al., 2019). In 2018, the share of women among doctoral graduates in engineering, manufacturing and construction was 29%, while the share of men in education was 33% (European Commission, 2021; p. 36). It is no surprise that the abilities people assign to the fields closely match the stereotypes of men resp. women, thus being both, consequence and cause of horizontal segregation (e.g., Thébaud & Charles, 2018). For instance, a study shows that women are underrepresented in academic fields (e.g., philosophy or physics) whose practitioners believe that one needs raw, innate brilliance (Leslie et al., 2015).

⁴ While 79% of women do at least one hour of housework a day, only 34% of men do so. Unpaid and paid work combined, women work 55 hours a week and men 49 hours (European Institute for Gender Equality, 2017)



Secondly, vertical segregation describes the fact that on average men hold more occupations with greater status and power. Vertical segregation is influence by the function of stereotypes which is not only descriptive, describing how group members apparently are, but also prescriptive, prescribing how group members ought to be. For gender stereotypes, this means that women and men who do not conform to these stereotypes are socially sanctioned. On the labour market, this especially affects women in positions of higher agency and dominance (Williams & Tiedens, 2016). These women are less liked, less promoted, less supported than their male counterparts, which in turn contributes to vertical segregation.

Finally, the leaky pipeline (for data see European Commission, 2021, p. 181) describes the phenomenon that women are much more likely than men to drop out of universities due to parenthood and family work (Joecks et al., 2014). Role expectations and related stereotypes that describe women as more caring, empathetic and warm-hearted than men are one of the main reasons for this effect. When men begin to perceive themselves and other men as more caring, friendly and helpful, will they be more willing to break down traditional role divisions (e.g., Van Grootel et al., 2018) and share family work with their mostly female partners.

How to counteract biases and stereotypes in organisations

A comprehensive list of methods to counteract biases and stereotypes goes unfortunately beyond the scope of this chapter (a good overview can be found, e.g., in Llorens et al., 2021). However, you will find in this book many organisational measures that will also help to counteract stereotypes and biases in the long run. What they have in common is that they are effective measures for gender equality in organisations overall.

Effective measures:

- Are data-driven, i.e., they are supported by a body of regularly assessed data (e.g., data on the vertical segregation within a company or quantity and forms of sexual harassment and their context factors).
- Are expertise-based, i.e., the assessed data is interpreted by gender- and diversity experts who develop scientifically supported and tailored measures (e.g., having decision-makers write a justification for a specific personnel decision reduces the influence of biases and stereotypes).
- Are policy-entrenched, i.e., the measures must be written down into the rules of an organisation with the aim of making sustainable change (e.g., a measure could be that the number women/men invited to an interview must be at least in line with the general gender ratio in the field and the career level; another measure could be to increase diversity in hiring committees while rewarding the time spent on them).
- Hold people accountable, e.g., organisation and department heads must be held accountable automatically and as a policy for (not) achieving diversity goals.
- Are openly supported, i.e., organisations must publicly, clearly and continuously commit to concrete equality goals and values (e.g., against sexism).
- Are funded, i.e., the organisational fight against bias stereotypes and for equality and diversity cannot be done for free, voluntarily and part-time. In order to facilitate real organisational change, it requires a dedicated team with financial resources and organisational power.

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02 EXPERIENCES **TIPS LESSONS**



What difference does it make when GEPs are implemented in higher education or technology research, in organisations of varying size and in various countries?

> Why are personal stories about inequalities so important?

How can transfer agents and communities of practice support change?



Hana Himi Beit Berl Academic College **BBC**



Maya Ashkenazi Beit Berl Academic College



Vered Shidlo-Hezroni Beit Berl Academic College **BBC**

Implementing GEPs in diverse academic landscapes: the Israeli case – Beit Berl **Academic College (BBC)**

Diversity in Academia

The promotion of equality between women and men is a task for the Union, in all its activities ... Gender equality is a core value of the EU, a fundamental right ... In business, politics and society as a whole, we can only reach our full potential if we use all of our talent and diversity ... the intersectional perspective will always inform gender equality policies" (European Commission 2020).

In light of the aforementioned, gender equality in science and academia is undoubtedly a rightful ideal to strive for. But how could it be implemented in real life? What does it actually mean in day-to-day procedures and norms, explicit and implicit 'rules of the game'? More specifically, what does it mean to have a gender-equal and diverse academia, especially in an extremely diverse country such as Israel? The BBC team has been dealing with this issue from the beginning of the CHANGE project in 2018, during the institutional benchmarking, and throughout all phases of the Gender Equality Plan (GEP) implementation at the college until 2022. Although the GEP experimentation in BBC is still an on-going process, and not without challenges or imperfections, we would humbly offer our perspective and insights on how to implement GEPs in diverse academic landscapes. Or rather, how to implement GEPs to promote diverse academic landscapes.



Ina Ben Uri Beit Berl Academic College **BBC**



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According to the Merriam-Webster dictionary, diversity is "the condition of having or being composed of differing elements ... especially: the inclusion of people of different races ..., cultures, etc. in a group or organization". Beit Berl Academic College is evidently a diverse institution. It is a multidisciplinary academic college of education, focused on training teachers in four faculties: Education; Society and Culture; Arts; Counselling, Treatment and Educational Support¹. Its multicultural campus is characterised by a diverse mixture of multiple identities, genders, ethnic groups and cultures of students as well as academic and administrative staff: younger and older², Jewish and Arab, secular and religious, veteran and immigrant, local and international. But is this diversity demonstrated equally across all hierarchy levels, especially at the intersection with gender?

Gender benchmarking

From a gender perspective, BBC has a striking majority of women – about 72% of its administrative and academic staff and about 85% of students; as well as women in key positions such as President, three Deans of Faculties, Vice CEO for academic development, Chair of the Appointment Committee, and a high percentage of women in several decision-making bodies and academic administration positions and duties. Nevertheless, it seems that women at the college still face barriers and 'glass ceilings' when they work their way up in the academic promotion system. Similar to other higher education institutions (HEIs) in Israel and worldwide, the percentage of women in BBC academic staff decreases in senior positions (figure 1), their share is less than 50% in the most three powerful decision-making bodies (figure 2), they are promoted less frequently than men (figure 3), and consequently are less represented in the highest academic ranks of professorship (figure 4). Why are women promoted less frequently in the system, despite their high percentage overall?

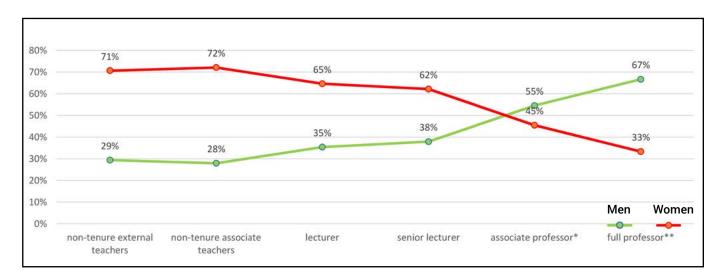
Assuming the academic promotion process is unbiased and solely dependent on merit, the off-hand answer might be that women are probably less compliant with the promotion criteria, more specifically research productivity, meaning the number and quality of scientific publications. Indeed, productivity in research is a very important factor which is taken into consideration in academic promotion processes (MOS 2019a). On average, women are considered 'less productive' in academia: they publish less, apply less frequently for funds and receive fewer grants than men (SHE Figures 2018 - figures 7.1 & 7.3, Ministry of Science & Technology 2019b). This gap has a decisive influence on promotion in academic institutions, which tend to prefer research to teaching and service (Aiston 2015). Reports by the Israeli Ministry of Science indicate research productivity as one of the major factors that contributes to female drop-out rates from the academic promotion track (MOS 2019a and 2019b). But is this answer sufficient to encompass the deep roots of the gender gap in BBC, considering its diverse and unique characteristics?

¹ The Faculty of Couselling, Treatment and Educational Support was established in the beginning of this academic year 2022/23.

² Many of the students in the master's degrees or teaching certificate programmes are in their 40s - 60s, as part of their career development or career change.

Figure 1: Proportion (%) of men and women in the Academic Staff

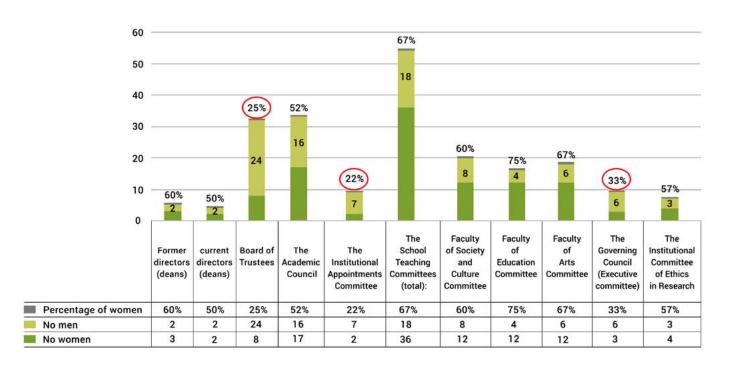
Beginning of 2020/21 Academic Year, **Beit Berl Academic College**



^{*} Associate Professor – including Associate Professor of Creative Arts

Figure 2: Women representation in decision-making bodies

Beit Berl Academic College 2020



^{**} Full Professor – including Full Professor ranks granted by institutions outside of Beit Berl

Figure 3: Senior Staff Promotions

Beginning of 2019/20 Academic Year, Beit Berl Academic College

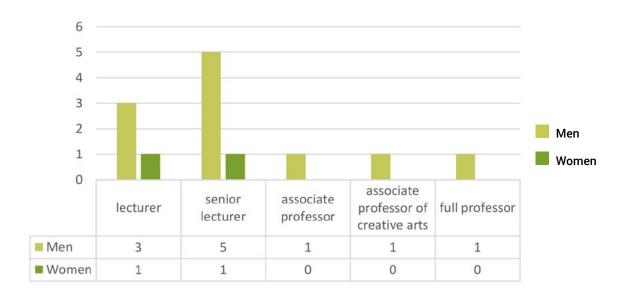
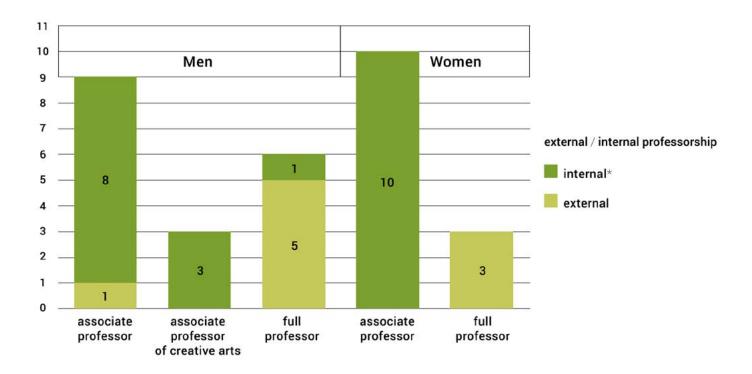


Figure 4: Associate and full professors

Beginning of 2020/21 Academic Year, Beit Berl Academic College



^{*} internal - rank issued at Beit Berl College external - rank issued at another academic institution

^{**} Note: Data may vary a little throughout the academic year, in accordance with retirements and promotions

Clearly, a more thorough investigation was needed, considering aspects such as diversity, multiculturalism, minority groups and the national context. Therefore, it has been decided to tackle the issue by **dedicating part of the** BBC GEP to collecting additional data in three perspectives: 1) an online survey on work-life balance addressed to BBC academic staff; 2) interviews with BBC female staff members holding three different academic ranks; and 3) interviews with women academics of Ethiopian origin, as a case study for a special minority group in academia. The first two studies provided inputs regarding challenges faced by BBC staff members in their mid-career stages, the third study provided a general perspective on challenges faced by women of a minority group in their early stages of tertiary education acquisition. Finally, the data was analysed both within institutional and national contexts, focusing on the general state of budgeted academic colleges, thus providing a broader perspective on this unique group of HEIs in Israel. In the scope of this chapter, only the main highlights of each of these perspectives will be presented, followed by a short discussion of conclusions.

Data findings

Work-life balance online survey

"The academy is not exactly...(a) paradise of work-family integration...it... fraught with pressures, competition, and gendered work expectations" (Sallee et al., 2016: 188).

Research points out that work-life balance (WLB) is of great concern for women with academic careers, in regards to tenure track demands (Ward and Wolf-Wendel 2012). Cinamon (2009 and 2010) emphasises the special significance of academic women's need to cope with family-career management alongside the intersection of their different identities. The workloads often spill-over to the domestic obligations and influence work-family expectations of both women and men, even though women are still expected to be mostly engaged with home duties, while men are expected to be breadwinners above their responsibilities as fathers, according to gender norms (Reddick et al. 2012; Sallee 2014).

Considering the abovementioned, the main objective of the WLB survey was to better understand the way BBC academic staff members of both genders perceive the integration of work and family in their lives, and the factors that influence their perceptions. What makes it harder to balance an academic career and a family life? What might help to better integrate them both? Answers to these questions might lead to 'higher research productivity' and academic promotion for both genders.

To this end, an online survey was disseminated through the college-web to all staff members during 2019 (prior to the COVID pandemic). About 28% of BBC academic staff members (159 of 571) responded to the survey during a period of about six months. 68.2% were women and 31.8% men, 78.1% Jewish and 21.9% Arab (see table 1). These percentages are consistent with those of the entire staff. Therefore, the survey sample well represents the academic staff of the college with all its multiple and diverse characteristics. The survey consists of two parts a quantitative part with structured questions based on Wayne, Musisca & Fleeson (2004), and Sharp et al. (2013), and a qualitative part with open questions.



The main findings from both parts are as follows (unless mentioned otherwise, the data are based on table 1):

- The majority of respondents are women (68.2%), but there is a significant difference between Jews and Arabs: 75.2% of the Jewish respondents are women, in comparison to only 47.1% of the Arab respondents. On the one hand, it seems that the Arab staff is more gender balanced than the Jewish staff. But on the other hand, considering the fact that women constitute more than 80% of the Arab students, but less than half of the Arab staff, maybe the gender gap among Arab staff members is actually higher than the one among Jewish staff members. This finding requires further examination of the data, in order to develop tailor-made intervention actions adapted for this specific group of staff members.
- 78.5% of the respondents are married, almost all of them have children –
 94.9%, 2-3 children in most cases (76.6%). This finding confirms the relevance of work-life balance to all staff members, as caregivers to children.
- Half of the respondents are in the tenure track and the other half are in the non-tenure track. But the share of women in the non-tenure track is higher than their average share in the staff (71.4% compared to 68.2%). Similarly, the women's share in the tenure track is lower than their average share in the staff (63.6% compared to 68.2%). Moreover, almost half of the respondents (46.2%) work in another academic institution (figure 5). This means that women are more likely to work in precarious conditions than men and, consequently, must seek employment in several workplaces and have higher workloads.
- More than half of the respondents perceive teaching as the more fulfilling and important aspect of their work, compared to research or other duties (60.8% and 62.1% respectively, see figures 6-7). Moreover, 68.1% dedicate less than half of their time to research, while 60.5% dedicate more than half of their time to teaching (see figures 8-9). These findings might indicate a gap between what is determined by the institution as important for promotion (research) and what is perceived by staff members as important (teaching). This gap of perceptions might be one of the reasons why staff members (mostly women) are less engaged in research, hence are less academically promoted in the college.
- Content analysis of the qualitative part yielded four main themes as reasons for work-life imbalance: 1. general overload due to the abundance of tasks at home and at work; 2. "blurred boundaries between home and work" the college's demand of wide availability, a lot of work at home beyond business hours²; 3. workplace relationships lack of consideration of personal needs; 4. lack of occupational security.

² Note: the data were gathered during 2019, prior to the COVID pandemic.

Table 1: Work-Life Balance survey – participants' information

	Women	Men	Total					
	Gender (159 responds)							
Participants Median age	107 (68.2%) 50	50 (31.8%) 52.5	159 (100%) 50					
	Ethnicity (15	5 responds)						
Jewish Arab	91 (75.2%) 16 (47.1%)	30 (24.8%) 18 (52.9%)	121 (78.1%) 34 (21.9%)					
	Marital status (158 responds)						
Married Divorced Single Other	81 (65.3%) 9 (69.2%) 8 (88.9%) 10 (83.3%)	43 (34.7%) 4 (30.8%) 1 (11.1%) 2 (16.7%)	124 (78.5%) 13 (8.2%) 9 (5.7%) 12 (7.6%)					
	Parental status	(158 responds)						
Have children No children	102 (68%) 6 (75%)	48 (32%) 2 (25%)	150 (94.9%) 8 (5.1%)					
	Number of childre	n (149 responds)						
1 2 3 4 More than 4	11 (78.6%) 31 (62%) 49 (76,6%) 8 (57.1%) 2 (28.6%)	3 (21.4%) 19 (38%) 15 (23.4%) 6 (42.9%) 5 (71.4%)	14 (9.4%) 50 (33.6%) 64 (43%) 14 (9.4%) 7 (4.6%)					
	Professional employme	nt track (154 responds)						
Tenure track Non-tenure track	49 (63.6%) 55 (71.4%)							

Figure 5: Do you work in another academic institution?

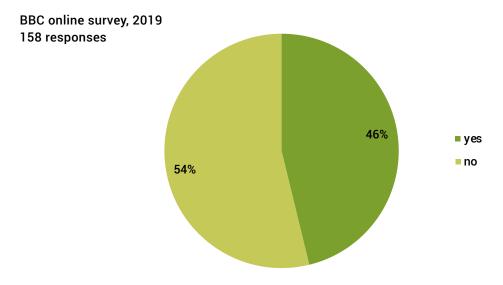


Figure 6: What is the most important aspect of your work?

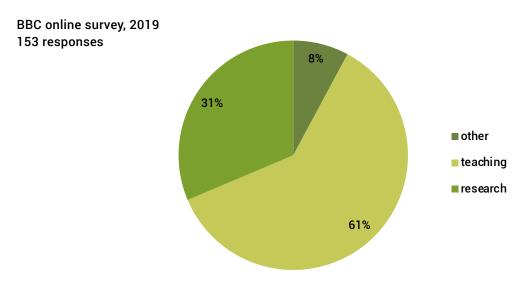


Figure 7: What is the most fulfilling aspect of your work?

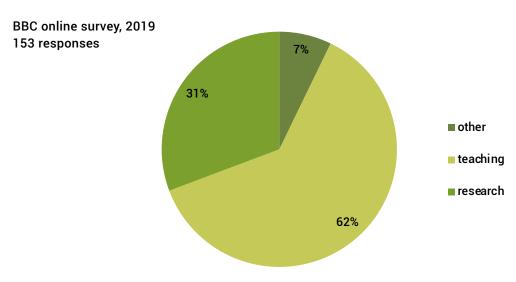


Figure 8: What is the share of your time dedicated to research?

BBC online survey, 2019 150 responses

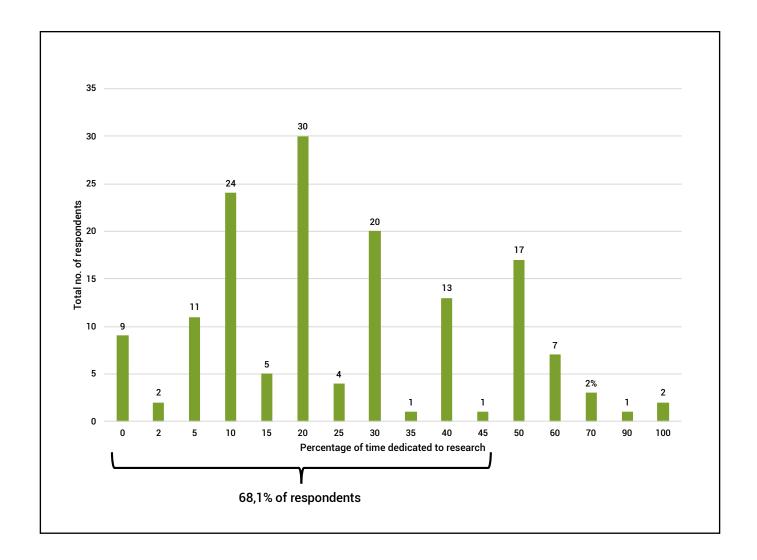
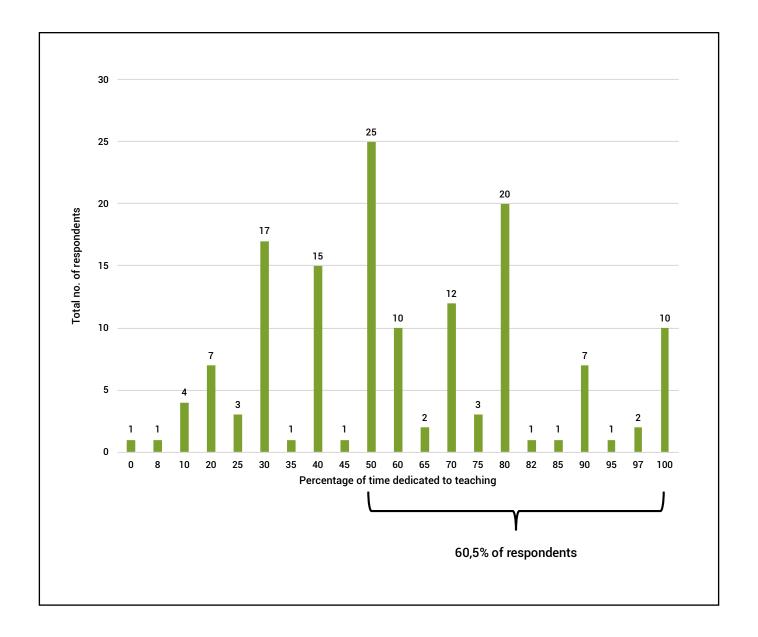


Figure 9: What is the share of your time dedicated to teaching?

BBC online survey, 2019 149 responses



Interviews with female academic staff members

In the framework of this study, 15 in-depth qualitative interviews with women academic personnel were conducted among three different academic ranks (Senior Lecturer – SL, Lecturer – L and Non-Tenured Lecturer – NT). The purpose of these interviews was to identify and evaluate institutional barriers affecting women's promotion at BBC, in addition to strategies that they used to overcome such barriers, according to their various posts and ranks. The interview methodology, based on Josselson and Lieblich (2001), enabled the identification of different themes, which could help to understand the women's personal subjective and reflective experiences, interpretation of reality, and feelings regarding their promotion, including different elements which influenced their promotion processes.

I have no idea how to apply for promotion and what is required for that, and the feeling is I will not get promoted because of other people on the service list. It's amazing, I work more than X years here. I'd love to be promoted, but...I would like to understand..." (NT interviewee)

I have academic work in three colleges. I work here because I need to earn my basic income...because I am a non-tenure employee...My time is full 24/7. I don't have a minute for myself...a sense of a crazy race. It's not about better exploitation of time - I simply put a lot of time in work...Something which is *impossible..."* (NT interviewee)

The complexity of coping with the demands of academic work environment was a major topic for the interviewees, and the themes that emerged from their narratives produce a clear picture of a conflict-ridden trap due to their multiple roles (MR). The interviewees stressed the effort needed to regulate between their three different intersecting identities: their gender identity, alongside their breadwinner identity needing occupational-economic security, opposite their academic identity with aspirations for promotion through research and publications. This interface was interpreted differently according to the interviewees' different ranks, personal experiences and achievements. In a higher academic rank (SL) the experience was expressed as challenging yet successful, satisfying and enriching. Contrastingly, in lower academic ranks (L, NT), the women expressed dominant feelings of failure, tension, inability and lack of a sense of belonging to the academic institute.

In sum, the interview findings yielded similar themes demonstrated in the WLB online survey of staff members. In particular are those concerning the lack of supporting conditions for staff members to engage in research and consequently to get promoted:

- A lack of understanding and knowledge of the academic promotion process: poor access to organisational information regarding promotion criteria; partial access or transparency of information, sometimes transmitted informally as oral knowledge, in too late stages of the academic career.
- Multiple roles and identities as a hurdle to women's availability for research and publication.



- Lack of appropriate infrastructure for research: lecturers in BBC, as a public budgeted college, are required to comply with promotion criteria similarly to universities but without the corresponding resources. More specifically, they are required to teach for more hours and are less supported by research funds in comparison to their university peers.
- **Lack of occupational security:** The interviewees' expressed a sense of lack of occupational security, especially in the non-tenure track, resulting in multiple workplaces, overloads and stress.

Interviews with women academics of a minority group (immigrants of Ethiopian origin)

To enter and integrate into a society, immigrants must acquire not only the language but also the society's culture, norms and values. In this respect, education is a crucial variable which can advance people and change their status in society, especially in traditional societies (Gretty, Nermin Abadan-Unat 2015). Education is also regarded as a form of cultural capital, which with respect to academic life, relates to tacit knowledge in connection with teaching and research (Macfarlane and Jefferson 2020). Therefore, in order to enable diversity in academia, it is of great relevance to study and understand special challenges faced by marginalised groups in it. However, there is sometimes a problematic tendency to treat intersecting aspects of marginalised groups separately. For instance, Crenshaw (1989) criticises feminist theory by arguing that intersectional experience is greater than the sum of racism and sexism, and that any analysis overlooking intersectionality cannot sufficiently address the particular manner in which Black women are subordinated. Boys and Grieco (2003) argue that migration theory has often failed to adequately address gender-specific migration experiences, which may result in differential outcomes for men and women, e.g. job opportunities, work environment and wages.

In light of all this, this study, which was conducted in the framework of the BBC GEP, attempted to examine a special group in Israeli academia from an intersectional perspective. The study focuses on the personal experiences and kinds of unique barriers and challenges faced by Israeli academic women of Ethiopian origin - mostly born in Ethiopia and immigrated to Israel as children - who studied in the Israeli education system. This group encompasses three intersecting aspects – gender, race and migration. We assumed that, by drawing on the personal experience of these women, we could identify means for encouraging similar future success by formulating suitable policy - both for this group and, perhaps, for other minority groups in academia.

A qualitative analysis was performed on ten semi-open interviews with women who held PhDs or were at various stages of acquiring advanced degrees in all kinds of HEIs and fields. The interviews reveal success stories of young women who managed to break through the glass ceiling and progressed to high academic degrees despite being the children of immigrants, while overcoming challenges such as prejudice, economic straits and the distinctive demands of the higher education system. Further elaboration on this study is given by Binhas & Himi (2021).

Diversity may be manifested not only by traits of people, but also by traits of... organisations, or professional tracks"

The interviews made possible an in-depth exposure to the interviewees' world, as well as the characteristics of their prolonged and complex coping throughout their lives. The results of these interviews elicited findings about barriers which originated in the respondents' external environment: economic barriers, lack of instrumental resources, their home environment and lack of proper conditions for learning, as well as barriers connected to their intrapsychic and emotional worlds, due to their confronting racist attitudes.

Findings show the interviewees managed to cope and overcome these barriers thanks to a strong sense of coherence and three significant inner strengths: understandability, manageability and significance. Thus, they could internally manage contradictions between the different worlds they live in, without plunging into dilemmas invoked by the conflicts, and instead to grow. In terms of Antonovsky's approach (1987, 1993, 1994) one finds that the women well understood the obstacles confronting them and drew on inner forces to deal with reality's challenges.

The interviewees understood that acquiring education is a long journey, but also that education is a vital resource offering them a channel to break through and successfully build a professional career. Along with the fact that academic education is based on personal achievements, the interviewees realised that they represent and demonstrate not only personal development but also the collective. By being role-models for others in their community, they constantly illustrate that personal and professional development are also possible within a challenging environment, strewn with assorted external barriers. Their ability to engage with that complexity, alongside the responsibility (or perhaps the burden it imposes) is reflected in the interviewees' narratives. It is evident that they underwent, and are still undergoing, processes of development and a constant internal discourse in the face of those issues.

The national context - women in Budgeted **Academic Colleges in Israel**

Diversity may be manifested not only by traits of people, but also by traits of elements, such as types of organisations, or professional tracks. In this respect, BBC is a unique institution in the diverse and complex landscape of HEIs in Israel, which comprises a variety of universities and colleges. Ever since the expansion of public colleges in Israel in the 1990s, there has been a fierce debate about their purpose and desired development. For a more detailed background on Israeli colleges - see info box.

Since the differential government budgeting model is based on research productivity rather than "teaching productivity", in addition to substantial budgets from research funds, colleges over the years started demanding that their staff members meet the research norms of the universities. As a result, college lecturers, who were mainly engaged with teaching, are now required to research more, and their promotion is stipulated by scientific publications (Almog & Almog 2020: chp. 3, 7). This situation may signal what DiMaggio and Powell (1983) refer to as " motifs of isomorphism" between colleges and universities, meaning strong similarity including characteristics of imitation in form and structure. But could colleges really 'imitate' universities while lacking equal resources? And what are the implications of such approach on staff members in colleges, especially women?

To answer these questions, we propose two theoretical frameworks of social inequality and intersectionality: Acker (2006) noted that inegalitarian practices in work organisations stem from broad social inequality in communities, including the academic community, in which inequality is perpetuated; Crenshaw (1991), on the other hand, proposed the "intersection model" as a theoretical framework to understand the coping of women who hold multiple identities intersecting one with the other in different ways. In this respect, we regard female staff members in public colleges as facing gender gaps stemming from the intersection of their multiple identities, in addition to structural inequalities between colleges and universities. Thus, women in colleges cope with conflictual and unequal situations as holding multiple roles in addition to extensive teaching (more than their university peers), work-life balance issues, lack of supportive resources for research, precarious employment conditions in many cases as well as rigid requirements for academic promotion, more specifically engaging in research.

Infobox: Budgeted Academic Colleges in Israel

According to available data on 2020/21, there are 42 budgeted academic colleges in Israel - 20 academic colleges and 22 academic colleges of education. 34% of all BA students in the country acquire their first degree in these colleges (25% in budgeted academic colleges and 9% in budgeted academic colleges of education), compared to 32% of the BA students who study in one of the eight budgeted universities - not including the Open University and the new private Reichman University. (CHE website: link)

The academic staffs in 2018/19 in these institutions were: universities - 34,300, budgeted academic colleges -8,500, and budgeted academic colleges of education - 3,800 staff members in all ranks and employment tracks (CBS 2020). These figures clearly indicate a higher teaching overload on colleges' academic staff members compared to universities. In general, the share of women in the academic staff in budgeted colleges in Israel is higher than their share in universities: in 2018/19 they constituted about 44.7% in budgeted academic colleges and 64.9% in budgeted colleges of education, compared to about 40.6% in universities – see table 2. However, they constituted only 15% of full professors in colleges compared to 17% in universities in senior faculty full time employment (FTE) positions (The Knesset 2018). Thus, the gender gap in higher academic ranks in budgeted colleges is wider than the one in universities.

Ever since the expansion of public colleges in Israel in the 1990s, there has been a fierce debate about their purpose and desired development. Originally, public colleges are meant to train students to become high-skilled workers by mainly offering applied BA degree programmes to all groups of society. They are neither inferior nor superior to universities, but essentially different from them. A college is not, as some may assume, a small academic institution aiming at becoming a university (Ben Zvi et al. 2002; Kirsch 2014a). Therefore, universities are more research-oriented, while colleges are supposed to put more emphasis on teaching (Kirsch 2014b). On the other hand, according to an opposite approach, engaging with research is essential for high-level academic teaching since the promotion of college lecturers is dependent on research (The Israel Academy of Sciences and Humanities 2013). Consequently, some research (mainly applied) does take place in colleges, but with 'modest' infrastructure and difficulties faced by staff members to dedicate time for it, since they are not exempted from their teaching duties (ibid). Still, much of the significant, but less acknowledged, academic activities which take place in colleges are probably what is indicated as "sector-specific activities that are challenging with regard to the concept of R&D. These are in particular related to education and training and specialised health care" (OECD 2015).

Table 2: Female academic teaching staff in universities and academic colleges, by employment track

		Universities		Budgeted Academic Colleges		
	absolute numbers	share of women	no. of women	absolut number		no. of women
Senior staff	7,924	32.8%	2,599	1,893	45.3%	858
Junior staff	10,866	51.6%	5,607	1,472	54.1%	796
External Lecturers	4,492	36.7%	1,649	4,800	44.9%	2,155
Total	24,268	40.6%	9,854	8,517	44.7%	3,809

Notes:

- (1) Data extracted from CBS (2020) table 4.51: Academic teaching staff in universities and academic colleges, by selected characteristics
- (2) Data in green cells are own calculations based on CBS (2020).
- (3) The share of women in the budgeted academic colleges of education in 2018/19 was 64.9%; no available data on distribution between different academic ranks. Source: statistical Abstract of Israel 2020 - No.71, chp. 4 - education, pp. 103-104 (in Hebrew)



Table 3: BBC Recommended intervention actions to promote diversity in academic environments

Identified gaps	Recommended intervention actions
Barriers and biases in academic promotion processes	 Identification of unconscious biases in organisational processes. Organisational transparency, accessible information to all staff members. Instrumental support in academic career management – e.g. training workshops, networking, mentoring etc. Gender mainstreaming and sensitisation in the organisational culture – e.g. research and teaching contents. Focused and tailor-made actions for special groups in society considering their multiple and intersecting identities. For example, women of minority groups.
Poor access to research funding opportunities	 Enhancing and providing adequate research resources and infrastructure to staff members, according to the academic promotion requirements. Personalised instruments, adapted to unique needs of staff members considering their multiple and intersecting identities. For example, women of minority groups.
Hegemony of the research-based academic promotion track	 Acknowledgement, validation, and implementation of alternative academic promotion tracks (creative arts and professional practice) proportional to their actual weight in colleges. Clear and transparent promotion criteria for parallel tracks.

Discussion and conclusions

To sum up, public colleges, and especially the academic colleges of education like BBC, are unique institutions in the diverse academic landscape in Israel. They are characterised by a high share of women in their staff alongside gender imbalances in various aspects, in particular women's representation in higher academic ranks. In the framework of the GEP implementation in BBC, data were collected and analysed in the institutional and national contexts in order to investigate the roots of the gender gaps and to develop suitable intervention actions to mitigate them. The analysis shows that some of the gender gaps in the institution are typical to all HEIs, while others are rooted in deep structural inequalities between universities and colleges, and the fact that academic promotion is mainly dependent on "research productivity" even in teaching-oriented institutions. It has been found that women at BBC face conflicting situations, trying to balance their multiple roles and intersecting identities with promotion requirements, which are neither fully transparent nor equally supported in terms of research funding, reduced hours of teaching to enable research, occupational security and instrumental or well-being support. Additionally, staff members are less acknowledged or rewarded for their other substantial academic contributions as teachers, educators, creators and professional experts. These challenges are most likely multiplied in the case of women of minority groups or traditional societies, as they have to pave their academic path, overcome socio-economic barriers and intersecting identities, and confront attitudes from their surroundings.

The solution for these challenges, in our opinion, should address all levels of implementation, meaning direct support to staff members along intervention actions in the structural level of organisations. Although essential and useful, the actions should not solely depend on facilitating research to female researchers in colleges, hence enabling them better access to the academic promotion track as it is. Rather, they should also promote diversity through alternative and equivalent career tracks to all staff members, men and women, with their unique and multiple identities, talents, assets and contributions. Such alternative tracks would confirm the valuable contribution of all activities to science and academia, including teaching, clinical practice, arts or other applied sciences, without jeopardizing the ethos of meritocracy and academic excellence. Although 'parallel' tracks of academic promotion exist as for Professors of Creative Arts and Professors of Practice, they are still regarded as exceptional and marginal compared to research-based professorship in Israeli academia ³. For further elaboration on recommended actions - see table 3.

To conclude, our argument is that 'diversity' is not only about enabling different kinds of individuals to enter and work their way up in systems according to a single hegemonic standard, i.e., a one-dimensional promotion track of basic research in the case of academia. Rather, it is about examining and questioning the fundamentals of systems, their multiple 'standards', identifying key sites of inequality, making structural changes and fostering multiple career paths, to enable equal opportunities for all kinds of individuals to realise their potential and contribute their assets back to the system. Therefore, multiculturalism and diversity should not be only the traits of individuals within homogeneous systems, but rather a by-product of heterogenous system structures and mechanisms. Thus, in addition to applying intervention methods to empower women researchers on the one hand and to neutralise gender unconscious biases in HEIs on the other hand, it is offered to challenge the science and research meritocratic paradigm as well. Such critical thinking might enable multiple academic tracks, thus fostering diverse and gender-balanced academic environments for all.



Staff members are less acknowledged or rewarded for their other substantial academic contributions as teachers ..."

³ For example, during 2018–2020 professorship applications in the 'parallel track' to the Council for Higher Education (CHE) by all HEIs constituted only 20% of all professorship applications. See in the CHE presentation - The Work of the Supreme Committees for the Appointment of Professors, a seminar given to HEIs, 20/12/2020, Link (in Hebrew)

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Hana Himi Beit Berl Academic College **BBC**

Integrating the gender dimension into research and teaching content: initiatives and practical tools to promote gender awareness in academic institutions and education systems

Education is the most powerful weapon which you can use to change the world." Nelson Mandela



Yarden Kedar Beit Berl Academic College **BBC**



Rimona Cohnen Beit Berl Academic College **BBC**



Maya Ashkenazi Beit Berl Academic College **BBC**

Introduction

Integration of the gender dimension into research and teaching content is one of the five recommended, content-related (thematic) areas to be included in gender equality plans (GEPs), as indicated in the Horizon Europe guidance: "The GEP should consider how sex and gender analysis will be included in the research or educational outputs of an organisation. It can set out ... the processes for ensuring that the gender dimension is considered in research and teaching. ... Research funding and research performing organisations both have a role to play in ensuring this." (European Commission 2021: 6).

In the case of Beit Berl Academic College (BBC), integrating the gender dimension into research and teaching content does not stand alone as merely fulfilling a content recommendation according to the institutional GEP. Rather, it is a fundamental and essential component of the BBC's organisational identity and culture as a teachers' training college with substantial impact on the education system in Israel. According to the CHANGE approach, as well as BBC's educational approach, changes in awareness and actions should be implemented at all levels - individual, institutional, cultural and beyond. Therefore, the inclusion of the gender dimension in teaching, education and research should be addressed to all stakeholders and participants - learners, their home environments, educators, researchers and teachers' trainers.

In general, education systems and academic institutions are often perceived as key factors in gender mainstreaming. For example, in the Israeli Gender Equality Index it is mentioned that: "The education system and academic institutions are central to the reduction of gender segregation in education and employment. Implementing a robust gender equality policy is vital to the eradication of this segregation and to increasing the number of women in fields that will be in growing demand in the future" (Tzameret et al. 2021: 27). Similar statements are mentioned in the Ministry of Education directive, where teachers and educators are described as key to changing social structuring, and that changing the educational perceptions regarding boys and girls from early childhood until high-school graduation will enable the realisation of both genders' potential and will promote a more equal and equitable society (Ministry of Education 2002).

Another advantage of gender mainstreaming in education, especially in HEIs, is the fact that it is relatively consensual, as opposed to other organisational domains or key sites of inequality, such as academic promotion, women's representation in decision-making bodies, gender pay gaps, etc. Education is addressed at 'others' (the students), therefore is often easier to deal with at the institutional level.

Thus, integrating the gender dimension into research and teaching content at BBC has been one of the institutional GEP's major thematic areas since the initiation of the CHANGE project in 2018, and was even expanded throughout the project's duration to comply with the Horizon Europe GEP requirements that were published in 2021 (see illustration 1). Including the gender dimension in research and teaching content at BBC was, and still is, expected to promote awareness towards unconscious gender biases, as well as to enable people to suggest initiatives and become active participants in 'talking and walking' the gender equality challenge. Whether academics, administrative staff members, or students, all are invited to join in and become ambassadors and transfer agents either within the college or in other educational work environments. In this chapter we will offer some guiding principles on how to include the gender dimension in research, teaching and education contents in research performing organisations (RPOs) or higher education institutions (HEIs) which are interested in including this aspect in their own institutional GEPs. These principles will be followed by some examples of BBC GEP activities that were developed within the framework of CHANGE, and could be modified or adapted to accommodate the needs of other institutions.



BBC Updated Gender Equality Plan

2021/22

- Personal interviews of ECE teachers and pedagogical advisors
- Gender training for ECE teachers and pedagogical advisors
- Support group for male ECE teachers
- Gender training for novice teachers

*Gender mainstreaming in research and teaching content

Gender in

education

המכללה האקדמית בית ברל الكلية الأكاديميّة بيت بيرل Beit Berl College

- On-line questionnaire
- Interviews
- Gender workshops for academic staff members

Work-life balance

*Prevention of genderbased violence

Institutional barriers and job security

- Personal interviews of staff members
- Gender workshops and lectures about unconscious bias
- Personal talks and guidance on academic career-management
- Organisational gender mainstreaming

*Horizon Europe additions

GE in a multicultural society

Women of minority groups, intersection of identities

- Personal interviews of women researchers of minority groups (Ethiopian, Arab)
- Mentoring
- Awareness events

Illustration 1: Institutional Gender Equality Plan (GEP) thematic areas at Beit Berl College, including updates in compliance with Horizon Europe's requirements – Gender in Education is at the top left corner.

How to include gender mainstreaming in research and teaching content: BBC tips and examples

Tip#1: Aim at the broadest circle of impact

Education, in its nature and essence, is meant to reach as many learners as possible. It provides learners with skills and knowledge that are later transferred to other learners. It is therefore recommended to consider the 'circle of impact' of the institutions' learners and develop tailor-made GEP activities which will contribute to their future careers. Where will they go after graduation? With what audiences will they interact and might have an influence on? In the case of a teachers' training college such as BBC, the circle of impact extends to early childhood, a crucial period in life where gender perceptions begin to evolve and form. That is why special attention is given in the institutional GEP to the gender dimension in early childhood education (ECE¹).



Dr. Seuss, "Horton Hears a Who"

The developmental and cultural process in which a child becomes aware of gender as a key component in society, and then goes on to form their own gendered identity, begins already in infancy (Yelland 1998). This process is guided by an array of challenges, forces and influences that stem from one's personal experiences in the particular familial, cultural and political environment in which they were raised (e.g., Kane 2012; LoBue 2011; Maccoby 2000). Generally speaking, the child's first years of life, up until the age of three years or so, are characterised by a flexible approach to gender. However, this flexibility – both towards others and towards oneself – begins to change in the pre-school years (3-6) both in the conceptualisation of gender and in its behavioural expression, and then becomes more rigid as the child matures (Bryan 2012).

In terms of the Attachment Theory (Bowlby 1977), children presumably adopt and acquire attitudes and forms of behaviour, either toward themselves or towards others, through observational learning from significant attachment figures, such as parents and caregivers, earlier in their lives. Thus, when these figures provide the children with a secure base and encourage them to explore from it, typically these children grow up to be secure and self-resilient, and to be trusting, co-operative and helpful towards others (ibid). Based on this theory, we assume the importance of having a gender-balanced environment in educational settings, certainly in such a significant part of young children's routine as kindergartens. The gender balance should be achieved, in our opinion, both in equal presence of male and female educators, as well as egalitarian gender perceptions and approaches of all ECE practitioners – students, pedagogical instructors and teachers.

In light of the abovementioned, the GEP activities that we have advanced as part of the CHANGE project were designed to map and understand current trends affecting both men's and women's gender-based perceptions in early childhood education, in order to create a significant change across several populations: students and academic staff in ECE teacher training programmes, ECE practitioners, men in ECE, and children and their parents.

¹ Also referred to as ECEC – early childhood education and care.

Tip#2: Learn your target audience

People have different perceptions, approaches and levels of knowledge regarding gender. Therefore, it is important to duly design GEP activities which are suitable to multiple audiences, especially regarding teachers-to-be, de facto teachers or teachers' trainers. This tailor-made design requires in-depth acquaintance with your audience, whether by surveys, interviews, workshops or brainstorming with focus groups.

The purpose of this activity was to map and understand the perceptions of students and faculty members regarding gender equality and the promotion of women (and men) in higher-education institutions and work environments that are associated with the field of ECE. To this end, qualitative interviews were performed with 10 faculty members in the ECE department and 10 graduates of the ECE department who now work as practitioners in the field (all female). The interviews consisted of a narrative (open) part and a semi-structured part based on the subject's academic and work status. The data analysis (still in progress) reveals reoccurring themes or patterns and group related premises, cases, and explanations which construct gender-based perceptions of the interviewees. These perceptions are then analysed considering different ECE career trajectories.

Initial findings from the interviews suggest that the very act of conducting interviews raised awareness towards the issue of unconscious gender bias among the interviewees. In general, the interviewees demonstrated a great sense of competence, autonomy and social relatedness regarding their work in ECE. They were consciously driven by a true interest in their professional activities with young children, despite the low status and pay in this profession. The ECE work environment was described as feminine, a fact that has advantages and disadvantages. It was characterised by a 'common language' (mostly soft and sensitive), but also by a lack of a male perspective. It has a high percentage of women in key positions, yet many of them often feel the need to 'prove' their true motivations are professional, not utilitarian (having lots of school vacations, etc.). The interviewees expressed positive views on the need to promote gender equality in the field of ECE, especially promoting gender-balance among ECE practitioners – i.e. a higher percentage of men in this profession. However, they assumed that a change in this context would be very slow and more likely to happen in secular surroundings. Finally, the interviewees expressed an interest in getting more guidance regarding gender-related issues in ECE. Specifically, advising their students and graduates regarding their career trajectories and providing them, as well as parents, with effective tools to shape an equal, open and tolerant gender environment in kindergartens.

Based on findings and conclusions from the interviews, further initiatives and policy recommendations are suggested for future years:

- Developing a line of workshops and training programmes for academic staff focusing on promoting a perceptual change regarding gender equality and the promotion of women in higher-education institutions and work environments that are associated with the field of FCE
- Developing a guide for ECE teachers in Israel which focuses on language and gender (e.g., a list of to-do/not-to-do rules when addressing boys and girls).
- A comprehensive report with specific recommendations regarding the promotion of gender equality in ECE, addressed at the college's management and the Israeli Ministry of Education. This report is intended to initiate a conceptual shift in pre-school settings, academia and the job market in Israel regarding gender-related issues in the field of ECE. Specifically, it will include a set of remedies for reducing dropout and increasing work longevity in ECE for male students, academics and educators from different regions and ethnic groups in Israel. Moreover, it will specify an array of gender-oriented contents for academic and applied (field) programmes in ECE, applicable both for Israel and for ECE settings in other countries.

Tip#3: Think outside the box – tackle the issue from unconventional perspectives

Processes of institutional change are often characterised by addressing direct solutions to clear problems. For example, lower percentages of women in STEM professions are often tackled by initiating special programmes to 'empower' and 'encourage' women. An additional 'outside the box' way would be, for example, to equally 'encourage' men to engage in social sciences and humanities (SSH) professions. Our tip is, therefore, to add unconventional perspectives. For example, focus not only on women, but also on men.

As in the academic world, the actual job market in ECE is clearly a "gendered field" (Scurfield 2017), that is, a profession predominantly occupied by women. For example, in Israel, only about 1/100 ECE teachers are men, whereas in the most 'liberal' OECD countries about 10/100 are men (Kedar et al. 2020). This overwhelming, worldwide under-representation of men in ECE has been often associated with the field's low status in comparison to other sub-fields within the K-12 educational arena as well as other, more gender-balanced professions. One of the problematic outcomes of this situation is that it creates an inter-generational cycle of biased gender perceptions and conceptions (Chapman 2015; Del Río and Strasser 2013). Firstly, most children simply do not meet male educators in their early years, and thus form a misguided view of the connection between gender and profession. Moreover, female practitioners in ECE tend to (often unconsciously) transfer the gender-related norms of their society and treat boys and girls differently in terms of their behavioural and cognitive expectations from the children (e.g., Wolter, Braun, and Hannover 2015) or by teachers' different use of language – e.g. levels of sentence complexity, abstract expressions, discourse styles and intonations when communicating with boys versus girls in the pre-school classroom (e.g., Blaise 2005). In order to create a more balanced work environment in ECE settings, there is a clear interest in recruiting and supporting more male workers (Warin 2018). The success and contribution of such an inclusion is dependent on whether a diverse range of male workers may be naturally accepted as part of the work force, instead of searching for an idealised male professional (Rohrmann 2016).





Workshop for men in the field of Early Childhood Education, 2/2/20

Teacher training programmes in higher-education institutions around the world have an extremely high percentage of women among both faculty and students. The Department of Early Childhood Education in Beit Berl Academic College is no different in this respect — around 98% of its faculty members as well as students are female. To tackle this issue, a group of about 60 Israeli male students, faculty and educators in ECE was initiated by BBC in 2020. The main goal of this group is to form a peer learning platform and a "safety net" for men in ECE, in which they will be able to share their experiences, get advice that will decrease dropout rates and dissatisfaction, and encourage them to express and employ their unique talents and approaches in their work with young children. The group had a face-to-face workshop in 2020, prior to the COVID pandemic, and since then has been active mainly through online platforms. Hopefully, this forum will contribute to a more gender-balanced work environment in ECE settings in Israel.

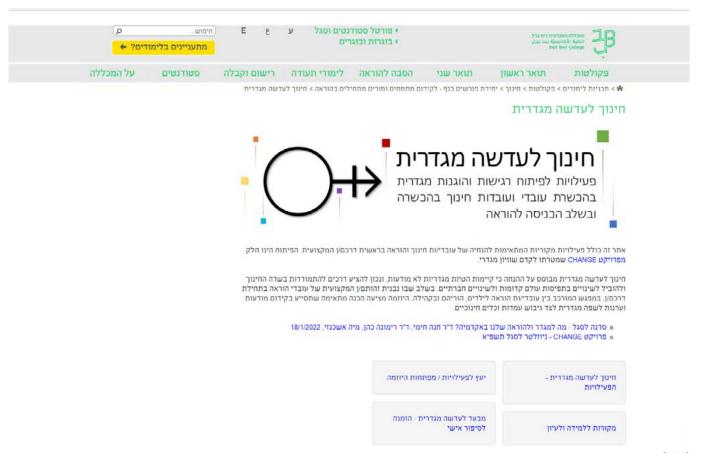
Similar to the findings from the qualitative interviews, men in the ECE forum demonstrate a great sense of competence, autonomy, social relatedness and intrinsic motivation regarding their work in ECE, despite the low status and pay in this profession. However, men in ECE struggle with their societal status, often experiencing confrontations and pressures even from within their close environments. To overcome these pressures, they demonstrated an internal, robust ability and motivation to resist the common gender order in ECE and thus become 'transfer agents' to promote conceptual change in this field (cf. Kedar et al. 2020).

Tip#4: Raise awareness through a variety of useful and sustainable activities

People are sometimes 'blind to' or unaware of the gender issue, especially when it intersects with other identities or issues on the agenda. Alternatively, they might be aware of the issue, but too overloaded with other urgent matters, and therefore unable to dedicate much time for it. Our tip for this would be to show your colleagues the benefit of gender mainstreaming by providing them with sustainable activities they can use in their teaching or research. These activities will intensify gender visibility, raise awareness and motivate your colleagues to engage and even develop and share their own creative ideas.

Example ⇒ Education for a gender lens – lesson plans for novice teachers

CHANGE BBC team members, together with partners from the BBC Novice Teacher Training Unit ('Porsim Kanaf'), developed a lesson plan kit for teachers in their internship year - "Education for a Gender Lens". The kit went live in May 2021 on the college's portal as well as on the Ministry of Education - Pedagogical Space - Gender Sensitive Teaching - Principles for Implementing Gender Thinking. The site offers an array of original activities for promoting and implementing gender mainstreaming in teaching and education for teachers in the early stages of their career - training, starting teaching and beyond in their regular work. The offered activities can be used as-is or be adapted according to the target audience and context, or used as inspiration for developing new lesson plans by novice as well as experienced teachers. Some of the lesson plans developed within this initiative were implemented at various opportunities, such as school lessons, webinars and internship workshops for new teachers.



'Education for a Gender Lens' webpage, Beit Berl Academic College [link]

Example ⇒ Filmed interviews with academic staff members

As part of the "Education for a Gender Lens" initiative, interviews with BBC academic staff members were filmed and produced as short videos which can be added to lessons, workshops, or any other educational activity related to gender. Based on a narrative approach, the interviewees shared their personal and professional stories combined with their gender perspectives. The stories represent a variety of cultural, social, ethnic and professional backgrounds of both women and men, as well as their inner strengths, resilience and role models who assisted them throughout their career paths. Each video ends with the interviewee's own gender perspective and thoughts about how to promote gender equality in BBC, demonstrating how each one is or can practically become a 'transfer agent' on an institutional level and beyond. The videos will be publicly available in the BBC website by the end of this academic year – the Novice Teacher Training Unit webpage.²



Through a gender lens: an invitation to a personal story – a filmed interview with **Dr. Safieh Hassonah Arafat**. [link]

Tip#5: Use in-house expertise

Academic institutions are often characterised by expertise which 'brands' them as unique, in all sorts of fields (not necessarily gender studies). Try to invite these special experts in your institution to get on board and contribute their scholarly knowledge to the 'gender effort'. By doing so, you can gain new and creative ideas for gender mainstreaming, while your colleagues can reach new audiences and fresh perspectives in their own research and teaching.

² So far, one of five videos were uploaded to the site. The other videos will be uploaded by the end of the academic year 2021/22.

A team of scholars and senior librarians ³ from the Yemima Center for the Research and Teaching of Children's and Youth Literature in BBC joined the CHANGE effort and developed a summary called Gendered Issues in Children's Literature Critical: Observation, Reading Recommendations and Exploration. The summary provides critical thinking, gender and feminist perspectives on 15 children's books, as creative inspiration for teachers and educators who are interested in including the gender dimension in their teaching. As testified by the library team in the introduction summary, "selecting books to be worthy of this list was no simple task. The reason for this was not a paucity of suitable literary works, quite the contrary. During the last two decades, many children's and youth's books founded on the feminist struggle, gender equality and the pluralistic values of the early third millennium were published. With this abundance in mind, we decided to recommend 15 excellent, but less familiar books, or at least books whose names won't be the first in any gender-focused list. While we couldn't ignore the once-in-a-lifetime classic that is 'Pippi Longstocking', we also recommended no less wonderful books, of great literary significance and undeniable contribution to the development of critical thinking. The second leg of the list consists of 15 articles and textbooks on gender equality in children's and youth's literature." An English version of the summary is now being prepared for 9 out of the 15 books, ones which were originally written in English or have well-known translated versions in English, for potential use by English teachers.



סוגיות מגדריות בספרות ילדים התבוננות ביקורתית, המלצות קריאה ועיון

חיברו: ד"ר עינת ברעם אשל, שני לירז-פדרמן וגבי קון

'Gendered Issues in Children's Literature - Critical Observation, Reading Recommendations and Exploration, Beit Berl Academic College [link]

Gender awareness events are an inherent part of the institutional GEP. Their purpose is to launch initiatives, disseminate, celebrate and mainly get the gender issue on the agenda and public discourse. Unfortunately, gender is often dealt with as a 'one-time event', e.g., for International Women's Day. The BBC CHANGE team decided to dedicate the last year of the CHANGE project to sustainable activities within the institutional context. Therefore, the annual Women's Day event was expanded to a whole week under the framework of education, teaching and research. The week (starting February 27 until March 3, 2022) was labelled "Gender and Tolerance Week", during which several lecturers from BBC gave a variety of 20 lectures, workshops and webinars focusing on gender aspects in their field of expertise. We hope this concept will contribute to greater awareness of unconscious gender biases, as well as to sustainable inclusion of the gender dimension in the college's 'main business', i.e., education, teaching and research.

³ Dr. Einat Baram Eshel, Shani Liraz-Federman and Gaby Cohn.



Gender and Tolerance awareness week in BBC - 27/2-3/3/22 [link]

Tip#6: Incorporate gender mainstreaming in organisational routine procedures

The most important aspect of gender mainstreaming is sustainability, meaning ensuring the continuation of its implementation for years to come. A useful tool for this can be incorporating gender mainstreaming in organisational procedures. Procedures may sometimes seem 'technical', like rubrics or 'tick boxes' in forms, protocols of committees, or other routine activities. Nevertheless, when incorporated wisely they can be quite efficient and effective. Efficient – because they require relatively little effort (such as 'ticking the box'), and effective - because they engage large groups of employees within the organisation for a substantial period of time.

Another BBC initiative for integrating the gender dimension in teaching, in compliance with Horizon Europe's goals, is the "Gender Mainstreaming Spectrum". The "Spectrum" defines various degrees of gender mainstreaming in the BBC various courses - from one gender-related component (such as a lesson, a paper, gender-sensitive language, etc.) to an entire course dedicated to the subject. Academic staff members were asked to examine how the gender dimension can be included in their teaching content and methodologies. As a reference point, in 2021 the college offered 17 courses whose titles were relevant to the topics of sexuality and gender.

Degrees of gender awareness implementation at the college

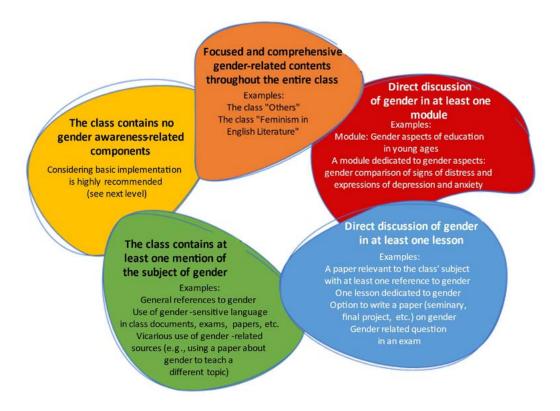


Illustration 2: The gender mainstreaming spectrum in teaching content, Beit Berl College 2021 [Link]



What is the connection between our academic teaching and gender? A webinar for BBC staff members, 18/1/2022

As we see it, the topic of gender is relevant and tethered to a variety of other topics, and so can be implemented in a much larger number of classes, even if only as a single mention rather than a dominant topic throughout the class. Further explanations and practical examples of ways to implement the Gender Mainstreaming Spectrum were offered in a webinar to BBC staff members entitled "What is the connection between teaching and gender?" in January 2022. Staff members who are interested in implementing gender mainstreaming in their courses were invited to consult the CHANGE team further on this subject. Finally, the Gender Mainstreaming Spectrum was included as a 'ticking box' in the college's syllabus form, which is filled in every year by BBC lecturers for all their courses. This way we can ensure that gender aspects are taken into consideration in the courses' planning and design for years to come.

Conclusions

To conclude, gender mainstreaming in teaching and research content is an important thematic area in gender equality plans, especially in HEIs oriented towards education, as in the case of BBC. Implementation activities under this category are expected to raise awareness of issues such as unconscious gender bias, and to promote tolerance and diversity in multicultural environments, not only within the institution – but in formal and informal education systems as well.

Our main message and recommendation for those who are willing to include the gender dimension in their teaching and research content would be to implement a psychopedagogical approach; that is, to create a variety of different kinds of activities and practices which are implemented consistently and persistently, adapted to the specific 'organisational context', targeted at different audiences, and tailored at each one's unique perspective and language. In our opinion, this strategy could draw people's attention to the gender topic, make them curious and engaged, and encourage them to implement gender equity strategies within their research, teaching and education content for future generations of learners and educators.

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Equal opportunities strategy in a large applied research organisation: the Fraunhofer approach

Interview

CHANGE partners Madlen Baumert and Janne Haack conducted an online interview with Dr Katharina Scharrer from the Fraunhofer-Gesellschaft headquarters in Munich about the equal opportunity strategy at Fraunhofer. In this valuable exchange, Ms Scharrer gave her input from HQ's perspective, and Janne Haack and Madlen Baumert added their viewpoints from the individual institutes



Dr. Katharina Scharrer, expert in diversity and gender equality in the HR Development department of the Fraunhofer-Gesellschaft in Munich.

Dr. Katharina Scharrer

Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e. V., München, Germany © Fraunhofer-Gesellschaft 2020/ Daniel Blaser 2020

Equal opportunity strategy for a complex decentralised organisation

Janne Haack and Madlen Baumert: Science, business and politics are currently at a point where we need to change the cultures of organisations and their operating environments in order to create equal career and development opportunities for all genders.

Dr Katharina Scharrer, you are an expert in diversity and gender equality in the HR Development department at Fraunhofer in Munich. You are responsible for creating concepts and programmes for the Fraunhofer-Gesellschaft in the area of career development and the promotion of equal opportunities and diversity.

Thank you for agreeing to an interview with us.



Does the topic of equal opportunities have any relevance at all for the Fraunhofer-Gesellschaft?

Katharina Scharrer: Equal opportunity at Fraunhofer has been set as a clear corporate goal since 2013 and is being driven forward with a comprehensive overall concept. We constantly apply internal evaluation processes. For example, we re-evaluated our TALENTA programme¹ and conducted a large survey at Fraunhofer that addressed, among other things, where women see obstacles in their careers. These milestones have helped us to further develop our concept.

Janne Haack and Madlen Baumert: In such a large research organisation with more than 70 different individual institutes, how do you design an overall concept for equal career opportunities that fits all the individual institutes?

Katharina Scharrer: Something that fits all institutions is a mixture of approaches on an individual level but also on a structural level. This requires adapting processes and structures in the institutions and creating a higher awareness and know-how for more equal opportunities. These structural measures aim, for example, to have checklists for the gender-inclusive design of job advertisements. Individual and structural measures aim to promote equal opportunities and therefore contribute to a change in culture.

The Fraunhofer-Gesellschaft, as the world's leading applied research organisation, has 76 institutes and research units throughout Germany with a total of more than 30,000 employees. Each institute is a separate organisational unit. Thus, areas in which equal opportunity is practised in our organisation are examined and evaluated both centrally and decentrally. We have summarised six areas: culture development, monitoring, recruiting, career development, communication and excellent operating environments for the compatibility of family and career.

From headquarters, we offer measures, programmes and action aids in these six areas, and the institutes can decide for themselves what is suitable for the individual institute's focus and what they can use. Setting priorities means that an institute considers the status-quo of equal opportunities: how are women, men, other dimensions of diversity rooted at our institute. Then it analyses: why we are in this position, why, for example, do fewer women apply, why do we not have any women in management positions. Then the institute goes into individual processes, asks analytic questions and formulates goals that are smart and realistic to achieve.

Once these goals are in place, the individual institutes decide in which fields of action they should develop further with regard to equal opportunities. We provide support here by offering a variety of action tools, i.e., programmes that can be used at the institute, but each institute decides what focus it wants to set and what is needed.

¹ The TALENTA programme is a comprehensive career and development programme for female scientists and managers at the Fraunhofer-Gesellschaft. In addition to networking among the women involved, it offers appropriate qualification opportunities and a "career time" in everyday working life to give the participants the necessary freedom for their own further development in their professional and management careers in applied research.

Madlen Baumert: I have the same view from the perspective of an individual Fraunhofer institute: there is a good balance of structural and individual measures. In this context, the structural measures help a lot. For example, monitoring of equal opportunities has been going on at the Fraunhofer-Gesellschaft since 2013. With the help of the HR department, the individual institutes have to compile the figures relating to equal opportunities for women and men once a year. These numbers are presented to the management in order to sensitise them to the subject and also to the employees at the staff meeting organised by the works council. It is very helpful that this is a requirement of the head office and strengthens the institutes' implementation of equal opportunity measures.

But there are also opportunities to implement institute-specific measures. I think for this purpose the diversity support programme is a very good initiative. It allows institutes to come up with their own measures and funds can be requested. In practice it is often the case that individual institutes look what measures other institutes have taken and implement them at their own institute to advance equality. So, if you can't come up with any ideas for measures on your own, you can have a look how things are going elsewhere. But there is also the opportunity to think about individual measures and what you would like to try out.

Katharina Scharrer: We have strengthened the individual approach for institutes through structural approaches. With the Joint Initiative for Research and Innovation², we have formulated research policy goals with regard to equality at Fraunhofer and have again specified the institute goals. We support this centrally through a new programme, the Support Programme for Equal Opportunities. The programme makes a major contribution to institutes getting to know each other and exchanging information on what they have done in terms of equal opportunities. This community of practice further strengthens the institutes' ability to learn from each other: what has worked for us, what has not. Of course, there are always institute-specific ways how equal opportunity can be spread around. Different institutes face different challenges, such as staff structure, aging, shortage of specialists, which universities are in the region or the attractiveness of the location. Therefore, it is important to have offers that apply to all, but also fit individually.

Janne Haack: You can also see that this has an effect of sensitising individual institutes or employees (e.g., in human resources) to the issue of equal opportunities. At the beginning of the CHANGE project, I felt that there was far too little awareness of the opportunities available from headquarters. The Support Programme for Equal Opportunities and the introduction of the institute-specific employment quotas for female scientists were a step that brought the topic of equal opportunities a little closer to the individual institutes. That is quite a valuable resource and things have changed in the past years.

² The Joint Initiative for Research and Innovation (Pakt für Forschung und Innovation – PFI) is a research funding initiative of the German federal and state governments and is intended to give non-university publicly funded research institutions planning security through continuous budget increases. In return for financial planning security, the science organisations have committed to research policy goals.



How to handle limited resources

Janne Haack and Madlen Baumert: You have been using your technical and methodological expertise to strategically drive cultural development at the Fraunhofer-Gesellschaft, including measures to reduce unconscious bias, promote equal opportunities for women in science and use gender-sensitive language. There is always relatively little time and money for diversity. How can the measures be implemented with limited resources (time, budget)?

Katharina Scharrer: As a prerequisite in an organisation to ensure team intelligence, excellence and innovative strength, the first important step is that top management understands that equal opportunity is no longer a special feature, but rather is just as important as a functioning research department. Equal opportunities are a prerequisite for our competitiveness and can generate more special features and creativity.

Katja Becker, the president of the German Research Foundation (Deutsche Forschungsgemeinschaft – DFG), pointed out: "Diversity and excellence are inseparable for me... It is the same in nature: the rainforest develops more dynamically than agricultural monoculture."3 I find this image very appropriate for equal opportunities and diversity in research. If we want to have more excellent ideas and be the best in research, we need the best minds and the best teams in our organisation. You have to show this to top management and get into conversation about the needs and added values of equal opportunities.

Equal opportunity is always a change process for which you have to create the need among those involved. In this process, people need different messages because many cope with change differently. In doing so, it is important to carry out dialogue with them and listen to the concerns and see how I can educate and create a persuasion effort.

Another point is that I absolutely need an empowered team to go into implementation with me. That means I alone cannot advance equal opportunity in an organisation. I always have to make sure to form a team with people from different areas (top management, human resources, recruiting, executive selection, corporate communications, strategy, research, works council). This can mean, for example, we at an institute have determined that we need to promote equality in a certain area. Then the relevant people are brought in, and the situation is analysed along with them: where do we stand, where do we want to go, what are our goals, what measures do we implement and who is responsible for what. With this knowledge, I can divide up packages accordingly. If you only have a small budget but want to get started, then you can look at this group and start with two to three smaller measures first.

https://www.jmwiarda.de/2020/04/02/diversit%C3%A4t-und-exzellenz-sind-f%C3%BCr-mich-untrennbar/

Supporters for equal opportunity strategy

Janne Haack and Madlen Baumert: Who needs to support the successful and sustainable implementation of a comprehensive equal opportunities concept (internally and maybe also externally)?

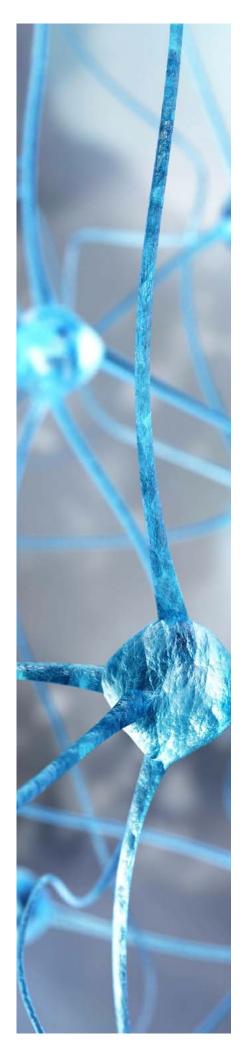
Katharina Scharrer: The achievement of equal opportunity should be implemented as a mixture of top-down and bottom-up approaches from a systemic perspective of holistic organizational development. The goal, reasons and needs should be formulated regularly in organisational discussions in order to involve everyone.

It is very important, especially if you only have a small budget, that you use the heads of the department and other executives at the organisation: who is open to the topic at the institute and can inspire others as a role model. People who are in charge and say: I am going to try this out and then report to other leaders at events at the institute on the experience I've gained. This is a very good way to approach the subject. Of course, the equal opportunity officers at the institutes should also be involved in shaping equal opportunities at the institute. It is also important to institutionalise the topic of equal opportunities and diversity management. In other words, there needs to be a person or a group of employees at the institute who is visible with their activities and competence. Because only what is visible takes place. That is an important aspect.

Madlen Baumert: I have also learned in the past that it is important to get people on board as supporters who are behind you and not to try to crack a hard nut by convincing people who are hard to convince. The more the group of supporters grows, the easier it is to win over additional supporters. In CHANGE, we had a transfer agent as a supporter who is from upper management.

Janne Haack: Regarding the issue of support, it was also very important for us to establish a diversity group. This group of people who are committed to the topic and, above all, come from higher hierarchical levels or have access to senior management was very valuable to us. There is no other way to implement measures in your own organisation. Besides this, it depends on the people who drive it forward. At our institute, that's the HR director, who is fully behind the subject of gender equality. With her as the HR manager, you have the best access to many areas.





Succes factors for equal opportunity strategy

Janne Haack and Madlen Baumert: In your experience, what are the success factors and useful measures for implementing an organisational equal opportunity strategy in mainly technically oriented research institutions?

Katharina Scharrer: We have noticed through the Support Programme for Equal Opportunities that when institutes address the issue top down and sit together with the right people and analyse the processes and look at them systemically, something changes in the institutes. It is important to address the needs of men and women in the sense of a modern agile appreciative organisation in which all people can contribute.

When measures are implemented, the situation improves. The issue of equal opportunities has become significantly more important. We have conservative role models and gender bias in our society. But something is happening. Career profiles and choice of studies have always been very gender specific. A more gender-inclusive career orientation already takes place in kindergarten and school. Women are more strongly encouraged and socialised to pursue professional goals according to their own interests and strengths and less according to role stereotypes. Unconscious biases and their reflection, a more conscious handling and reduction are an important lever in the cultural change at Fraunhofer. Reducing these biases helps to ensure that more women are invited to job interviews and are finally selected.

When you talk about equal opportunities at the management level, there are so many other aspects, such as the fact that studies prove that women participate less in the networks in which men are active, for example. Therefore, leaders should exercise "inclusive leadership" as an important future skill. This should be part of leadership development and gender competence can also be used as a criterion for leadership job advertisements. Otherwise, you will have a problem in the future in terms of equal opportunities in the organisation. You also need a standardised and transparent selection processes. In addition, you need career prospects that spark interest and management and work models that also appeal to women. I believe that these are success factors for equal opportunities in science careers.

The effectiveness and sustainability of the measures should be assessed, for instance, by monitoring key indicators such as the number of women applicants, the number of women invited and selected, the length of stay at the institute, tenure reductions and leadership positions, as well as the evaluation of workshops, such as unconscious bias trainings.

Equal opportunity is of course very central in terms of gender, but we still have the aspect of intersectionality, and that applies to all genders. You always have to discuss the issue with each other and not just women among themselves, but also with men, because equal opportunities must happen in dialogue, and men are equally affected by it, can commit to it and benefit from successes.

Madlen Baumert: For me, I learned once again from our conversation that it is important to set goals. With our diversity group, we started and analysed our situation at the institute. The monitoring that has been carried out at Fraunhofer since 2013 is a good basis for this. Pointing out the need was an important point for us. But we haven't really formulated any concrete goals yet. That is something we need to do there now.

Katharina Scharrer: Setting goals is very important, because the issue of equal opportunity is complex and it is embedded in so many areas. If you look at it in detail and determine for yourself that these are our broken-down goals, it is much easier to implement even small measures and then directly consider what should be avoided in the future or what further should be done.

Challenges at implementing an equal opportunity strategy

Janne Haack and Madlen Baumert: What are challenges in implementing an equal opportunity strategy and how can they be addressed? What recommendations and advice can be given to other organisations facing similar challenges?

Katharina Scharrer: Challenges are often the resistance of people who don't want to join the process in this direction. You have to do more intensive educational work here. If you do face resistance, you have to take the people seriously, ask them for reasons, what they would need instead, and get a feeling for where the real problem might be. Resistance is often a sign that a person has too little of something, receives too little or feels that he or she is being disadvantaged. You have to think about that in terms of innovative diversity management.

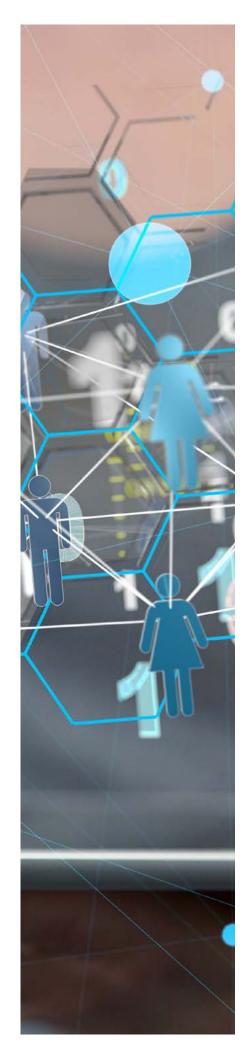
Receiving resources for measures is also a challenge, because if you set goals and plan to change things, you also have to invest personnel or material costs for this

One very clear challenge is how to get your numbers. First of all, you have to know the figures and be able to talk about them. And second you need people who are passionate about the topic and want to participate. That is how you can create the transfer at the institute, divide up the tasks and pull together.

Janne Haack: Yes, the biggest challenge is that you always have to cover your costs and think economically. Executives would like to see how much money is gained by implementing equal opportunities. It would be a good situation if you could just show that. Unfortunately, that is something that is not so easy to demonstrate. But that would be a good approach to convince people that you should work with it and on it and "live" equal opportunity.

Katharina Scharrer: What challenges did you face at your institute (IFAM)?

Madlen Baumert: It is challenging to continue to work on equal opportunity and also to find the right adjustments. It's very good for us to have the diversity group and to be in communication with the HR department and management. You have visions and ideas for how things could be better, but you need access to the right contacts who support you and who go along with you so that you don't give up.



Katharina Scharrer: When it comes to equal opportunity, you also can't expect that if you go into a field of action that it will automatically stay that way. For example, you can't just support the recruiting of women; you also have to work on the culture on site, the structures and working conditions, so that women stay. The issue needs to be looked at systemically and its effectiveness measured. That is also an exciting challenge, but it is by no means trivial.

Janne Haack: When we first started working on the issue of gender equity, there was often a feeling that the term gender itself was viewed negatively, and so was the work on gender equity. That has changed for the better. But it's also still a challenge that you often have to find another way to label or implement something without having people immediately against you.

Madlen Baumert: That is right, you soon had the brand stamped on your forehead. A lot has actually happened in recent years. Both in German society in general as well as in the Fraunhofer-Gesellschaft. The continuation of the Joint Initiative for Research and Innovation 2021 has brought the topic up again and raised its profile, which was then communicated to the individual institutes.

Personal most important insights

Janne Haack and Madlen: What are the most important insights for you personally that you have gained through your work in implementing an overall concept for equal opportunities in the workplace?

Katharina Scharrer: My personal insight is that equal opportunities should always be examined in the mirror of these six fields of action mentioned at the beginning, because it will never happen in just one of the fields. There should be an awareness of the need for equal opportunities and that equal opportunities are an important organisational goal at the institutes and at Fraunhofer as a whole. This attitude should really be lived by us and that is our goal. There are many dedicated people at Fraunhofer who also feel committed to this goal, and they are driving this forward with methodological know-how and passionate engagement.

Madlen Baumert: My personal insight is that diverse teams work much better together and bring new perspectives. The project made me work with different people than usual and I got to know a different way of working. The enrichment is that everyone gets to live his or her life as it suits them.

Janne Haack: Before, I never felt that there were inequalities and only realised they do exist through the work within the CHANGE project. It was scary at first, but it is also good to have gained experience through the project on how to do something about it, to have joined forces with others and that there are ways forward.

Katharina Scharrer: From your point of view, what have been the measures where you notice that something has changed?

Janne Haack: For us, the diversity group is an important success. The fact that we were given this measure with a bit of pressure from above was a contributing factor to its success. Otherwise, we would not have had the capacity to act. That is the biggest gain for us institutionally. When something comes up from the outside, you tend to have the pressure that something has get done.

Madlen Baumert: This also includes the gender equality plans, which are now required by the EU for project funding. In addition, the gender dimension must also be considered in proposals. For example, we have received an internal request as to whether we want to design a work package on the topic of the gender dimension in the research area of the project and whether we can contribute something there. Of course, the background is that the project will be evaluated better, but it still encourages us to think about these issues.

Katharina Scharrer: I think that is a good sign that you are on the right track if you are approached by new people or new areas from within the institution, because they see the relevance and the possibilities of integrating equal opportunities in the processes for themselves. These are the best conditions.

Madlen Baumert and Janne Haack: Thank you very much for the interview. It was great to exchange ideas with you and to hear your point of view from headquarters, which we could complement with our institutional experiences.

> For us, the diversity group is an important success. That is the biggest gain for us institutionally."

Gender in decision-making: the Portuguese case

Introduction

nhancing gender-equal leadership and decision-making processes and bodies at higher education institutions (HEIs) and research performing organisations (RPOs) as part of more gender-equal working environments has been in the agendas of international institutions and organisations (e.g., European Union, UNESCO, United Nations) since the late 1980s. Among these institutions, the European Union emerges as the promoter of funding mechanisms to incite structural change in science and technology institutions, namely through the implementation of gender equality plans (GEPs). However, despite considerable efforts by international organisations to accelerate gender equality in leadership and public decision-making positions, progress has been slow, and, simultaneously, socially, politically and geographically varied (Verloo 2007; Inglehart, Norris & Welzel 2002; Barbieri et al. 2020; European Commission, COM 2021). Data shows that women remain under-represented in academic and administrative leadership and decision-making positions in higher education and research institutions across Europe. According to the European Commission (COM 2021), only 14% of rectors in the 46 countries of the European University Association (EUA) members were women in 2019 (EUA 2019). In 2022, this proportion rose to 18,28%; nevertheless, despite this increase, women are still strongly outnumbered by men as university leaders, accounting for less than a fifth in all EUA member universities in 2022 (EUA 2022). One reason to explain these numbers is that leadership is still mostly associated with a men's activity and, according to Dunn et al. (2014), male-centric leadership models and norms have served to limit women's aspirations as well as their access to leadership roles. Thus, although women have succeeded in entering academic careers, they are still excluded from the academic elite, meaning from formal outstanding academic positions (Rogg 2003, in Diogo, Carvalho & Breda 2021). Improving gender balance in leadership and decision-making became thus one of the five paramount actions of GEPs.



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This chapter describes the journey that the University of Aveiro (UAVR) has taken as a CHANGE - CHAlleNging Gender (In)Equality in Science and Research – partner institution in implementing more gender-equal leadership and decisionmaking bodies and practices. The UAVR can be labelled as a successful case in promoting gender balance in middle management bodies (e.g., deans of university departments and polytechnic schools). In fact, when the project started, in April 2018, women constituted only 5% of members; one year after the implementation of the project, in 2019, this percentage increased to 20%.

Implementing more equal decision-making bodies – the case of the UAVR

The UAVR is composed of 20 organisational units (16 departments and 4 polytechnic schools) and each of them is managed by a dean. The dean is the director or president of the organisational unit (OU), designated by a selection committee composed by the rector and four other elements (Carvalho, Breda & Diogo 2018). The CHANGE project for the UAVR represented a unique opportunity to stimulate institutional change to promote awareness on gender equality, including among senior managers, contributing to the construction of more egalitarian working environments. Both senior and middle managers at the UAVR were highly involved and committed with the project, even if their perception on the UAVR-specific context does not acknowledge the existence of relevant gender inequalities.

Applying the CHANGE model of action, which includes five stages (i.e., 1. institutional gender benchmarking and awareness raising; 2. feedback and planning; 3. quick action; 4. strategic action and 5. sustainability and knowledge transfer), the UAVR undertook a quantitative analysis of gender-segregated data to benchmark gender imbalance at the institution (i.e., data on the composition of decision-making bodies according to the gender of the bodies' members). This first stage was crucial for the identification of a concrete phenomenon of gender (in)equality at the institution. Thus, information was collected on the following nature of governance structures:

- Governance bodies: those responsible for overseeing the activities, determining the future direction and monitoring progress against strategic ambitions.
- Management bodies: those related with the operational running of the university.
- Scientific and pedagogic bodies: those responsible for the scientific and pedagogical decisions strategic and operational decisions.
- Advisory bodies: those that provide advice to any of the previous bodies but without authority to make decisions.

The benchmark status overview at the UAVR revealed a strong gender imbalance among all the decision-making bodies, even if more significantly in the governance and management bodies, as can be seen in figure 1 and tables 1-4.

Figure 1 - Gender composition of decision-making bodies at the UAVR [2018 - D4.1, and 2022]



Table 1 – Gender composition of governance bodies [2018 – D4.1, and 2022]

Governance bodies	Men 2018 2022	Women 2018 2022	Total 2018 2022
Rector	1 (100%) 1 (100%)	0 (0%) 0 (0%)	1 1
Rectoral Team	8 (66.7%) 5 (62.5%)	4 (33.3%) 3 (37.5%)	12 8
Board of Trustees	4 (80%) 4 (80%)	1 (20%) 1 (20%)	5 5
General Council	12 (63.2%) 13 (68.4%)	7 (36.8%) 6 (31.6%)	19 19
Management Council/Board	4 (80%) 3 (100%)	1 (20%) 0 (0%)	5 3

Table 2 – Gender composition of management bodies [2018 – D4.1, and 2022]

Management bodies	Men 2018 2022	Women 2018 2022	Total 2018 2022
Deans	19 (95%) 15 (75%)	1 (5%) 5 (25%)	20 20
Executive Commission	50 (64.1%) 42 (48.8%)	28 (35.9%) 44 (51.2%)	78 86
Coordinators of Research Units	13 (68.4%) 17 (85%)	6 (31.6%) 3 (15%)	19 20

Table 3 – Gender composition of the scientific and pedagogic bodies [2018 – D4.1, and 2022]

Scientific & Pedagogic	Men	Women	Total
Bodies	2018 2022	2018 2022	2018 2022
Scientific Council	12 (50%) 13 (54.2%)	12 (50%) 11 (45.8%)	24 24
Pedagogical Council	15 (60%) 12 (48%)	10 (40%) 13 (52%)	25 25

Table 4 - Gender composition in advisory bodies [2018 - D4.1, and 2022]

Advisory Bodies	Men	Women	Total
	2018 2022	2018 2022	2018 2022
Council of Ethics	9 (75%) 5 (41.7%)	3 (25%) 7 (58.3%)	12 12
Disciplinary	5 (71.4%) 3 (42.86%)	2 (28.6%) 4 (57.14%)	7 7
Commission Student Ombudsman	1 (100%) 0 (0%)	0 (0%) 1 (100%)	1 1



The diagnosis of the gender equality situation at the UAVR, which took place at the beginning of the CHANGE project in 2018, in the first phase of the project, identified a gender imbalance in the management bodies, namely in the coordination of research centres, with women representing 31,6%; in executive commissions, where women represented 35,9%; and especially at the deans' level, with women representing only 5%: among the 20 deans of the institution, only one was a female (Carvalho, Breda & Diogo 2018). At the end of 2019 about one year after the start of implementation of CHANGE – data already evidenced remarkable improvements, with an increase of the percentage of women in these positions rising by around 300%. Women now (2022) account for 25% of all deans and 51.2% of members in the departments' executive commissions. Although they remain in the minority, the progress is notable, especially if one considers that these improvements have occurred without changing the regulations (figure 1 and tables 1-4). The benchmark status overview was complemented with interviews to UAVR key players at the beginning of the project to identify and understand institutional mechanisms and structures that could support or hinder the success of the GEPs, and to raise awareness for (potential) existing inequalities. Interviews were carried out between July and November 2019 with the deans of the UAVR's organisational units. Based on these, solutions for overcoming possible obstacles were discussed and pursued. Among them, the process through which the UAVR members access decision-making bodies, namely through election or nomination procedures, was also analysed. This is particularly important when analysing gender equality in top management and leading positions in HEIs and RPOs, as the way decision-making bodies are constituted can influence the gender balance in these bodies (Diogo, Carvalho & Breda 2021). Within this context, there has been a trend to replace the election by the nomination as the dominant process to occupy decision-making positions. Nomination processes tend to be more advantageous to women than elections. However, while it is acknowledged that the gender balance decreases with the increasing importance of the decision-making body, it was not possible to find a direct relationship between the way actors are selected for these bodies and their gender balance at the UAVR.

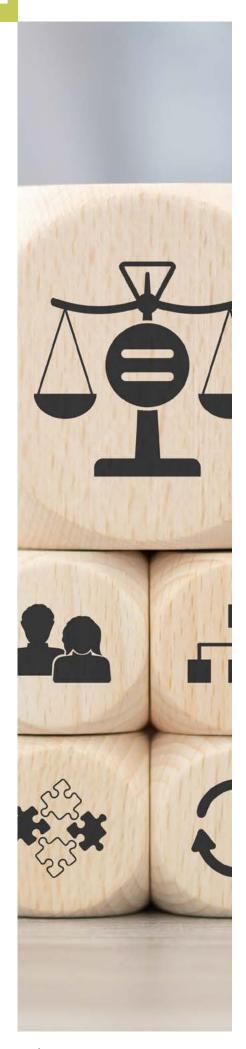
In addition to the identification of the problem, the benchmark overview helped to raise awareness for the needs and benefits of gender equality. In general terms, it was found that gender inequality was not perceived as a problem in the institution, and, roughly speaking, none of the interviewed deans considered their organisational unit to be particularly imbalanced (Jordão, Carvalho & Diogo 2020). Furthermore, when confronted with data demonstrating the gender imbalance in their OUs and in other decision-making positions of the UAVR, the interviewees argued that women simply did not want to perform these roles in the institution. In order to obtain empirical evidence on this hypothesis, the UAVR team decided to distribute an online questionnaire asking all staff in UAVR about their experience participating in these bodies and their motivations to do so. In parallel, it was also decided in the team meetings with the transfer agents (TA) to try to equalise the gender balance at this level. To increase women's participation as deans, specific steps were defined and implemented. The interviews, questionnaires and the benchmark overview provide important information in this area as it revealed factors explaining the reduced participation of women in these bodies and, as well, the recent increase of women deans (cf. figure 1 and tables 2 and 3). Among these factors, what was highlighted was a lack of interest in external networking mechanisms by the senior management; the process by which decision-making bodies are constituted; the overload of

work for the few women in higher positions associated, also with teaching overload; the lack of good practice examples; a strong belief in meritocracy in academic institutions linked to the promotion criteria to senior positions (e.g., the emphasis on scientific publications); contractual terms of employment and job insecurity (non-tenured, part-time contracts); barriers that women sometimes impose on themselves (family responsibilities, work overload, etc.).

Due to this awareness alone, i.e., without changing the regulations, it was possible to develop informal strategies aimed at enhancing gender-equal leadership and decision-making processes among the UAVR's bodies. These strategies were achieved by identifying women with competencies and willingness to perform the job and by giving them personal empowerment to appoint themselves to certain positions. In fact, this is another factor that, in our opinion, helps to explain the improvements in women's situation at the UAVR: the sensitivity to diversity and gender equality of some people in middle management positions. Individual commitment to the issue seems to lead some caring more and/or adopting practices related to gender equality, which include – in addition to the attempt to encourage women to apply for deanships - the search for genderbalanced working teams and the deliberate promotion of women's visibility in areas traditionally more associated with men. Such practices/care are, however, markedly informal and adopted on an individual basis.

By this time, due to the implementation of (short-term) actions to increase the visibility of the project within the UAVR and the awareness of gender equality issues it was also possible to observe in some participants' discourses an increasing awareness for these topics. This is so because the UAVR team involved the transfer agents right from the beginning of the project, and it is worth mentioning that the UAVR TAs are the Rector himself, the Vice-Rector for Life and Culture Policies on the campuses and, later on, the Vice-Rector for Research joined as a TA. The participation of the TA team at the early stage of the project has translated not only into institutional support and acceptance of the CHANGE project and its aims in the institution. The TA team also was able to identify early on other potential supporters (e.g., researchers, academic staff with different types of contracts, etc.) to increase the sustainable embedding of gender equality throughout the organisation, who became then key stakeholders. In this way, the message was conveyed to other members of the academic community, also because this issue was included in the electoral programme of the rectorate as well (in 2018 and 2022). In fact, these actions were instrumental to identify key stakeholders whose initial informal network evolved into a sounding board for the project, who then gathered occasionally specifically to discuss the GEP and its implementation.

Inviting experts and setting up brown bag sessions (informal conversations at lunch or coffee break time) and workshops to make gender equality more visible were also important at this stage of the project. Brown bag sessions proved to be relevant forums to discuss women's participation in decision-making bodies in an informal way with more openness. Some of the UAVR's gender equality initiatives were planned and implemented with the support of the rectoral team, especially because these initiatives were disseminated to the academic community by the TA team, e.g., emails sent from the rectorate office. Furthermore, most of this communication was (and still is) written with gender sensitive language, avoiding, whenever possible, the sole use of the masculine form.



An example of one such initiative was a workshop on unconscious biases with an international expert – Tony McMahon, Director of Diversity & Inclusion, from the Trinity College Dublin. This international expert – a man – was deliberately chosen to avoid the idea that CHANGE is dealing with women's problems to be discussed and solved by them. However, the dominant idea of the university as a gender-neutral institution and of the inexistence of problems with gender inequality resulted in low participation among middle managers, like deans and heads of research units. The high level of women participation in the rest of the academic setting, especially students but also staff, particularly when compared with the situation in most European countries, shows how much more challenging it is to raise senior managers' gender awareness (Carvalho, Jordão, Diogo & Breda 2020 D4.2).

Also important were the informal initiatives taken to stimulate networking among women in academia to raise their voices and increase their visibility. Among the networks created, one of the highlights is the UA-Women, a network of women researchers in STEM that now organises formal communications between women researchers in top positions to talk about their experience in academia, the obstacles they found and how they overcame them. Another relevant network is the Association of Brazilian Women, which intends to draw attention to the specific problems of Brazilian students at the UAVR. Furthermore, the UAVR team has actively participated in European conferences and sought to publish the analysis of its empirical work in international journals. Simultaneously, the UAVR team has initiated a national community of practice (CoP), contacting the leaders of national sister projects like SUPERA, PLOTINA and SAGE. The efforts already developed to create CoPs with the coordinators of the sister projects in Portugal were further enhanced in the workshops carried out at the UAVR.

The balance on the identification and implementation of these initiatives is positive. Implementing the CHANGE project and raising awareness about gender equality issues has helped explain several organisational improvements impacting senior and middle managers, especially through informal mechanisms and networks. For instance, growing gender awareness has translated into the use of gender-neutral language in some events and documents, as well as attempts to balance the presence of both male and female institutional actors at formal public events. At the UAVR, the involvement of key institutional actors, although punctual, has materialised in the activities developed within the project, in the direct participation in some initiatives and in the involvement in the design/ planning of some initiatives (e.g., invitation to the workshop on unconscious bias by the rector; participation on the sounding board). At the same time, both the project's and gender inequality issues not directly related to CHANGE have been increasingly highlighted in activities and events. So has institutional involvement in some external initiatives that were given even further visibility by the participation of members of the rectoral team (e.g., webinars, such as Teaching+ Project and/ or international webinar Promoting Women in Science).

Other actions performed by the UAVR team under the CHANGE project which have had a more or less direct impact in more women participating in UAVR decision-making bodies include gender and diversity subjects on the curricula of 3rd cycle students; balanced gender representation at public events and in academic examinations (e.g., doctoral examinations); sensitivity for parents with young children in the distribution of teaching workloads. These actions were paramount to enhancing the commitment of the involved researchers and TAs in the pursuit of a more inclusive and gender balanced institution on the whole, which in turn contributed to decreasing the gender imbalance in decision-making bodies at the UAVR.

It should be noted, however, that contrary to expectations, the negative evolution of the number of women as coordinators of research units between 2018 and 2022 (three fewer) highlights the complexity and difficulty in achieving sustainable improvements in gender equality in the composition of management bodies (table 3). It also highlights the fragility of the progress achieved and reminds us of the metamorphosing nature of gender inequalities. Institutional efforts to increase gender equality in decision-making bodies and processes therefore require the adoption of a holistic approach that allows for the evolution of several indicators to be monitored simultaneously in order to avoid possible setbacks.

Conclusions

The gender balance improvements with respect to middle-management positions - deans - at the UAVR resulted mainly from informal 'strategies' or mechanisms, driven by an increased awareness for gender (in)equality, by the perception of an engaged rectoral team, by the sensitivity and individual commitment to the issue and also by the implementation of the CHANGE project. Informal 'strategies' had, in the case of the UAVR, the power to strengthen, weaken or even guide institutional re/configurations that aim to promote women's access to decision-making positions, a process which corroborates the findings of Mackay, Kenny and Chappell (2010).

It is undeniable that the commitment of the institution/rectoral team to gender equality played an important role in improving the numbers of women participating in decision-making bodies. The introduction of the topic of gender equality in the electoral programme by referring to the GEP; the participation of the Rector and two Vice Rectors in the CHANGE project as TAs; the use of gender sensitive language in some of the communications sent from the Rector's Office were noticed in the academic community, conveying the message that there was and there is a concern with gender equality in the institution. This derived not only from discourses outside the organisation (notably at the EU level) but also from contacts and informal conversations that seem to have been intensified within the UAVR in recent years. It is amidst these contexts, marked by informality, that new dynamics seem to be building in favour of promoting gender equality. The idea of encouraging women to apply for decision-making positions, namely dean, takes shape and develops from these 'informal conversations'. In fact, although the implementation of the GEP in the University of Aveiro can be labelled as a successful instrument for gaining more women in management and decision-making roles and positions in academia, the authors fear that this change may be merely circumstantial or only due to and during the project, as the issue is the focus of attention. Therefore, monitoring and continuity of gender awareness measures are needed after the project itself is concluded. However, the UAVR case demonstrates the power of informal mechanisms, showing their capacity to strengthen, weaken or even guide institutional re/configurations that aim to promote women's access to decision-making positions.



To increase women's participation as deans, specific steps were defined and implemented."

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Useful tips for gender equality change agents

hese tips/practical insights for how to implement a gender equality plan (GEP) are one outcome of the CHANGE project1 and its activities, particularly, GEP implementation at the National Institute of Biology (NIB, Slovenia), as examples for knowledge co-creation² and exchange of good/best practices.

The NIB as a leader of WP3 'Boosting Women's Careers in Science and Research' was in charge of monitoring and drafting reports on how GEP measures implemented at CHANGE project partner institutions boost women's careers. The information gathered allowed us to gain an overview of various GEP actions and the ways they were implemented, as well as to observe the features that were common among all CHANGE partners.

On the national level, the networking and exchange of best practices within the community of practice Alternative Infrastructure for Gender Equality (Alt+G) enabled us to identify common features of GEP implementation among CHANGE project partners as well as those put in place by research performing institutions outside of the CHANGE project.

Common features that worked for all or a majority of the partners are presented here as tips/practical insights on how to implement a GEP at your own institution.

Soft and non-shaming, non-aggressive and non-clustering ("us VS them") communication

Soft communication is initially needed to prevent staff members from "shying away" from gender-related topics.

Soft communication requires patience as gender-related topics usually need to be explained multiple times. Soft communication is not only verbal; it also extends to behaviour, conducted activities and the team's approach/enthusiasm. If a team seems to be bored or annoyed by gender topics or the topics are communicated in aggressive and/or clustering way, it is unlikely to positively resonate with staff members.

Additionally, soft communication can then be capitalised for other purposes, e.g., project coordination, fairer promotion that is based on meritocracy.

¹ CHANGE project partners implementing GEPs – University of Aveiro (Portugal), University of Žilina (Slovakia), Fraunhofer Institute for Manufacturing Technology and Advanced Materials (Germany) and Beit Berl College (Israel).

² Knowledge co-creation tools and measures were designed and led by CHANGE coordinator Interdisciplinary Research Centre for Technology, Work and Culture (Austria) and RWTH Aachen (Germany).

Raising awareness

People tend to be uncomfortable with events, phenomena and topics that they do not understand, have no knowledge about or are not willing to learn about. Raising awareness about gender-related topics helps to open people's eyes/to lead them to understanding that gender-related issues are indeed a part of everyday life.

Start with soft awareness raising activities and you will see that, in time, you will create and/or grow a group of staff members that are going to be keen to learn about gender and to participate in the activities.

Creative, voluntary, informal activities

Informal and voluntary participation in initiatives is an example of good practice for achieving positive results. Do not be afraid to bring new and not yet implemented activities to your institution. Creative activities which staff members are unfamiliar with (e.g. photo exhibition) or include an element of novelty will attract more attention and arouse employees' curiosity.

One creative way to conduct activities was identified: combining formal and informal activities. Formal activities can be various workshops or trainings, while informal ones could amount to gatherings after the work or lunching together on regular basis and using the occasion to explore gender-related topics. This simple activity stimulated the participating women and men alike to be more aware of gender differences in career progression.

Targeted measures

The planned activities need to be concrete, enabling 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.

An effort must be made to involve people for particular activities which are meaningful to them. Experience has shown that many people are rather resistant towards gender topics, thus a great many will often ignore trainings covering solely the topic of gender. In this case, the gender topic could be "hidden" or combined with other topics. An example of "hiding" a gender topic in gender-related activities can be simply hosting research presentations by female colleagues. This type of activity combines gender topics (the researchers are women) and science (presentation of the research) and allows for building an informal community within the research performing organization.

Activity topics should be targeted and must be selected carefully so that the already busy staff members do not choose to ignore these events, thinking that participation in events not directly related to their scientific activities will result in a waste of productive hours. This false impression can be avoided by grounding activities with relevance to other aspects.



Be flexible, but at the same time persistent

Keep in mind that it is impossible to predict the unpredictable, and even carefully planned activities or plans for implementing a GEP can and most likely will be subject to change.

A GEP as well as its implementation is "a living" document/process, thus you should be ready to react and usually react fast to the changing environment/ circumstances. Just remember the recent worldwide Covid-19 pandemic, which made it impossible to perform a great deal of activities, especially the ones requiring in-person presence. Teams that responded quickly to the changes managed to keep their projects running and achieved their targets or even better results.

Please note that being flexible does not mean easily abandoning or changing main goals/objectives. It means modifying the measures to reach those main goals/objectives.

Persistence in the implementation of GEP is essential, as, first of all, gender topics usually face a lot of resistance and are not always considered to be the most important. Moreover, you will need lot of effort and energy in order to get people on board and to gather "critical mass", hence the institutional approach to gender topic changes. Even if you have heard "no" nine times, do not give up. Ask once again, maybe the 10th time you will hear "yes".

Foster allies and build a network of supporters

Senior managers, institutionally important or the most charismatic staff members can help attract attention to the GEP and its activities. Moreover, having them on board will awaken the curiosity of other staff members ("if these people participate in the activities, it means that activities are worthwhile") as well as spread the word about the topic of gender.

Ideally, you should create a group of staff members who have a close relationship with the heads of the institute and are responsible for human resources. Through collaboration with this group, actions can be carried out and implemented quickly and very efficiently, and the perspective of the institute's management is always present. For more information see chapter on transfer agents prepared by Thaler & Dahmen-Adkins, page 97.

Do not forget and never ignore those who show resistance, as sometimes they can come around and become the best allies for one or more concrete activities or even promoters of the topic of gender within the institution and join the network of supporters.

Finally, this network can exist as an informal support system – go-to places to ask questions and provide feedback. These are especially important for promotion, integrity and harassment issues.

Make it personal

Speak about real people and their stories. Speak about wives, daughters, sisters, mothers, friends, neighbours and co-workers. Make their voices heard, let them be loud, get each male staff member who hears the stories about inequality women face to think about the women in their own lives, that their beloved women might and most likely will face the same or similar challenges at some point in their personal or professional lives.

When it is presented as a real-life story, it can be painful even thinking about the fact that this could be the destiny of your daughter or another important woman in your life. Thus, it may help make men to think twice before taking a particular decision and consider whether it is fostering discrimination or increasing existing inequalities.

Show/prove that GEPs and gender equality will benefit your institution

Explain and support your statements with the evidence that gender equality and diversity bring additional value to the institutional working atmosphere, working culture and relations among staff members. An improved working environment will increase work performance, productivity and at the same time will lead to better overall institutional performance.

Moreover, highlight that workplaces fostering gender equality and diversity are the trend nowadays and not outliers, increasing work productivity but also boosting retention rates of highly qualified staff and attracting new talent.

Gather and use gender disaggregated data

Collection and analysis of sex/gender disaggregated data is crucial for the design of appropriate actions and for the development of analysis/studies aimed at a deeper understanding of gender inequalities.

Gender disaggregated data and the outcomes of its analysis can be used to support statements regarding existing institutional gender inequality or discrimination. Statements supported by concrete data and information are more convincing and are taken more seriously.

Adapt terminology

Take into consideration that even terminology used in your proposed GEP or talking about gender-related topics could be a source of resistance. Terminology should not be limited only to female staff member, it should include all staff members.

In order to attract/include more staff members in gender-related topic discussions, it is advisable to use all genders, including terminology such as "diversity" instead of "gender equality". This is important in environments that are already dominated by women (e.g., biology, education) or/and other majorities (e.g., sexual orientation, nationality, etc.), so that male colleagues or colleagues belonging to various minorities do not feel left out.

The preferential use of the concept "diversity" instead of "gender" seems to be quite relevant to an initiative's success as it contributes to decreasing resistance to gender-related topics.

Finally, it is not only about terminology in the sense of diversity. It is also about inclusion of the gender topic into broader ones, such as principles of humanity, morality, ethics and other similar topics that are understood as values by most of societies all over the world.

Use of surveys, conduction of personal interviews, creation of researcher databases

Use various data collection tools - it might be personal interviews, surveys, questionnaires or any other tool that can be used with the intention of receiving feedback/opinions regarding topic in question (for example, working conditions, needs of staff members, work-life balance, etc.)

Surveys and - even more so - interviews are important to obtain direct feedback from the staff members. Interviews take more time but are personal and allow the interviewee to be more open. Crucially, they demand follow up actions.

The analysis of collected data allows for the determination of the state of topic in question and the ways to improve.

Exchange of best practices (organisationally, nationally, with sister projects, networks)

To avoid redundant effort, increase the impact of activities and enlarge the collaboration circles, joint activities are always useful. In addition, the need may arise to support each other in future, so it is wise to use sister projects as opportunities to start novel collaborations at the national and international level.

The exchange of good practice examples and experiences with other institutes and sister organisations is an important catalyst for impact. Exchanging experiences can give ideas for future activities or lead to dropping activities that are time consuming and less effective.

Use the "obligatory EC requirement card"

Finally, if you experience great resistance and it seems that nothing works, you can play the card of obligatory EC requirement: this means adopting a GEP in order to be able to apply for EU funding. As it is unclear what kind of monitoring tool will be employed by the EC for GEP implementation, it is important to create "a living document" that efficiently records your GEP and its success.



The sky is the limit! Be innovative, creative, enthusiastic, open-minded and honest!"



Anita Thaler

IFZ – Interdisciplinary Research
Centre for Technology, Work Culture

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Co-creating sustainable change with transfer agents

Introduction

common disadvantage of time-limited implementation projects with an institutional focus is the loss of knowledge at the end of the project. One reason for this lies in project staff whose employment contracts end with the external funding. With the end of the project and thus of the project staff's contracts, a lot of newly gained organisational knowledge 'leaves' the RPO (Research Performing Organisation), and therefore sustainable change only happens to a small extent. It is thus all the more important that permanent staff be involved ¹ in the planning and implementation of a gender equality concept and plan.

Hence, to support a sustainable institutionalisation of the GEPs and embedding of knowledge, CHANGE established the role of transfer agents (TAs) alongside the core project teams, who were involved in the project implementation itself. The positive results of involving TAs was already tested and evaluated in GenderTIME², a FP7 predecessor – or as we see it: an older sister – of CHANGE.

Transfer agents are persons who have certain managerial and/or hierarchical positions in the RPOs participating in GEP implementation as part of CHANGE. Importantly, their appointments are permanent. These are individuals who identify with the issue of gender equality and wish to promote it within their organisation. Thus, their role is to support the individual core teams, the micro-change agents, with identifying relevant areas of inequalities in their respective institutions, connecting them with inner-institutional key actors from administrative and academic fields and facilitating the implementation of the GEP by increasing its visibility.

In both projects, the TAs involved were asked before the project started whether they wanted to take on this role and thus contribute to the success of the project. The national core teams were responsible for identifying suitable persons. More information on the inclusion of TAs and other relevant stakeholders is provided in this handbook in the **chapter of Thaler, Dahmen-Adkins & Karner**.

With CHANGE ending after four and a half years, we wanted to use the opportunity to let the TAs reflect upon their involvement in their gender equality implementation projects. And for getting a more diverse and deeper understanding, we invited also former TAs from GenderTIME to tell us how their participation influenced their work once the project had ended. Can they still build on former experience and expertise gained within the project?

¹ Of course, our favorite recommendation would be to give all those hard-working project-based researchers permanent contracts since they have proven to be so valuable employees. However, while we wait for this wish to come true, and end insecure precarious job situations for many researchers, we propose to include permanent staff – additionally to the project team. And not just any permanent staff, it needs to be a specific kind, which will be explained in this chapter.

² GenderTIME (2013–2016) was funded under grant agreement nr. 321491 within the 7th Framework Programme of the EU.

Method

We conducted six interviews³ with transfer agents who had been TAs in either the former structural change project GenderTIME or in the 'younger sister project' CHANGE:

Interview sample		
Gender	Female	Male
	5	1
Type of organisation	Higher education organisation	Research organisation
	4	2
Gender knowledge	Gender expert at project start	Gender novice at project start
	3	3
Position	Top management position (dean, director, etc.)	Administrative position (equality office, human resources, etc.)
	2	4

Table 1: Characteristics of the TA interview sample

Although the interview sample is very diverse regarding their organisational, disciplinary and geographical backgrounds, the main difference amongst our sample group of six TAs4 is their initial, pre-project gender knowledge. Three of the TAs had previous gender expertise, two due to long years of experience as gender equality officers, another as a gender researcher; meanwhile, the other three started with a commitment to gender equality but with no previous experience in this field. Common among these latter three was an underestimation of the actual inequities in their institutions. They were surprised by the variety of actions which can optimise the gender equality on levels that they were not even aware of before their involvement.

Results

Looking back, all six TAs reflected in interviews on important knowledge they gained. Beside hands-on knowledge like how a GEP is set up, how activities are implemented, the TAs realised the importance of including decision-makers in GEP implementation, of allocating enough resources and monitoring measures taken. However, many of them did not realise what being a TA really meant, and that it took some time to fully understand the 'job description' of a TA, which was deeper and more complex than expected beforehand.

³ Due to anonymity reasons, we do not specify the project and country of the interviewees, as this information is available publicly and could lead to an identification of the interviewees. Therefore, both mentioned structural change projects are anonymised in quotes as "project X".

⁴ In this regard, it is also applicable to the current group of TAs.

One interviewed TA specifically uttered concerns about picking up the role in the context of a structural change project, which diminished during the project lifetime:

"I have to say that I didn't understand my role in the beginning of the project realisation all that well. I wasn't sure, if my position at the university would be strong enough to carry out some changes. Now I know that taking small steps is good way to improve the project outputs." (TA_5)

In the so-called gender equality newcomer organisations, participation in a structural change project as a TA also offered the opportunity to expand one's own knowledge on gender equality-related topics within, but also outside of, working life. This was supported, for example, by participation in further education measures, such as training offers. Some TAs reflected on their learnings at a personal level, with one stating:

"..., I have become a gender knowledgeable person due to project X ... My knowledge might not be particularly deep, but it's definitely broad – ranging from scientific gender knowledge to expert knowledge about relevant gender policies, and particularly for practical implementation. I learned about good practices, drivers and barriers for implementing GE in practice in various organisational and policy resp. national contexts." (TA_3)

"I have got now one hundred percent more information about GE and about reconciling family and professional life than before.

I was member of few very good trainings, which were organised under the auspices of the project X." (TA_5)

One TA explicitly mentioned the knowledge exchange to other TAs as very valuable, learning from other countries, other institutions, how other systems and ways of influencing work. This might be one of the most visible differences between the two sister projects; although CHANGE lasted one and a half years longer, due to travel restrictions during the Covid-19-pandemic (from March 2020 on), TAs (and team members) met fewer times in person. Also, the knowledge exchange activities amongst the organisational teams (including their own TAs) were only possible online over a long period of time and hence lacked the quality of face-to-face meetings and informal knowledge exchange.

Related to their personal development as a TA, one interviewee described that they first thoroughly examined and investigated their academic environment, and thus were able to identify the key sites of inequality in their institution. Based on this initial assessment, additional TAs were brought into their team to further drive the change process in various departments in this organisation:

"This step enabled the co-creation of GEP actions which are evidence-based and tailor-made for our institution. My development as a TA was therefore the transition from an 'independent TA' to 'Head of the TA team'. This shift required flexibility and adjustments, for example to guide and lead the other TAs and to co-create initiatives with them, rather than promoting initiatives all by myself." (TA_6).

TAs need social skills; they need to listen and to connect people of all levels in their organisation; they should be open to learning new things and sharing their knowledge. The following statement highlights the need for these skills very well in the overall picture and also emphasises the importance of bridging the so-called theory-to-practice gap⁵:

"Another important aspect is the theory-to-practice know-how. Meaning, how to combine theoretical knowledge and practical actions to raise awareness and to promote gender equality on campus. Also, how to keep people motivated and cooperative over a period of four years, through positive communication, teamwork, a sense of prestige and benefit from the project and a challenge which is significant and worthwhile academically, professionally and emotionally. Finally, the disciplinary knowledge which I gained is priceless, specifically the content about gender equality, unconscious biases and how to promote organisational changes." (TA_6).

⁵ You can find more information on the theory-to-practice gap in the chapter of Thaler, Dahmen-Adkins & Karner in this handbook.

All six TAs agreed that integrating GEPs as eligibility criterion for Horizon Europe was a very important step to institutionalise gender equality in science and research, and they all had successfully supported their change agents to implement GEPs into their organisations. Especially TAs from GenderTIME reported that they adopted their GEP long before it became an eligibility criterion for Horizon Europe, and that they covered all the aspects asked for by the European Commission. Even after the project ended, the GenderTIME TAs went on with their work. Some could build upon their experiences and integrate their gender knowledge in their management respectively research activities. Others had in the meantime retired but continued in various gender equality networks and activities, like organising campaigns and events against gender-based violence.

In their advice to future TAs, our interviewees agree that organisational change needs time, and therefore investing sufficient resources is crucial:

"To somebody like me, who is a professor, at the top of the hierarchy, I would say: 'Be prudent, don't be arrogant, try to have many people work with you, be modest about what you may accomplish, negotiate human resources and funds for your job of TA'." (TA_4).

About structural change needing time, one TA stated at the end of their interview:

.... be prepared for a long marathon with many hurdles and speed bumps along the way. Be capable of containing and surviving this complexity." (TA_5)

Therefore, a lesson learned from both projects is to focus on the most important aspects of change for your institution, and to implement 'quick wins':

"It takes a long time to change the culture of a university, it absolutely does, but if you can demonstrate incrementally 'look at what we've achieved', tangible things people can key into, that sustains the momentum towards the bigger change.

So, for me it is about the focus of what we do and making sure that we focus on the things that make a difference, and making sure that some of those we can do very quickly." (TA_1)

Conclusion

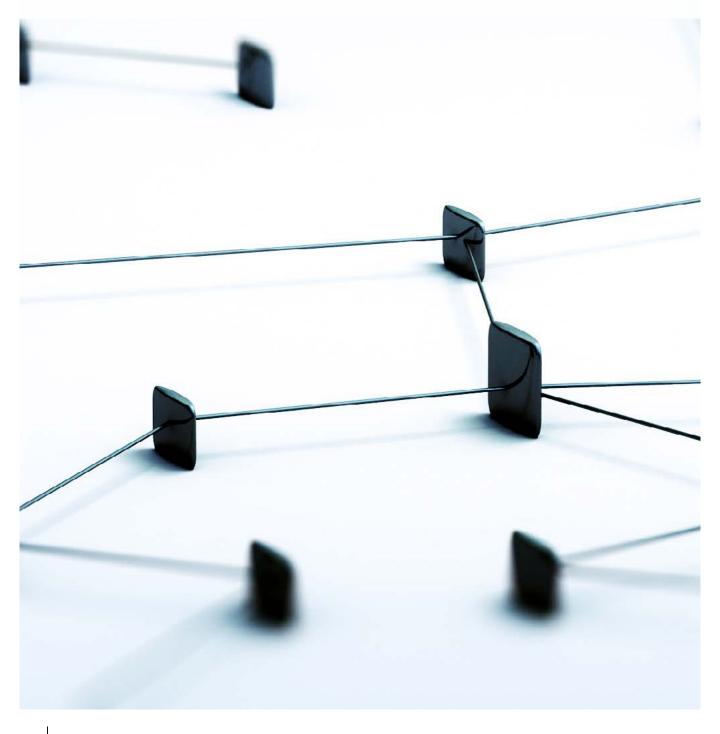
To reduce the fate of many projects whose successes end with the project period, the two gender equality projects Gender-TIME and CHANGE included permanent staff on their project teams with a commitment to gender equality and with the authority within their organisation. These so-called transfer agents (TAs) were involved in the planning and implementation of the customised gender equality plans. Thus, TAs should support the change agents: with identifying relevant areas of change, connecting them with a relevant network of administrative and academic stakeholders within their organisations and supporting the actual implementation of the GEP by increasing its visibility. To assess this support, interviews with the change agents would be needed in order to also get a picture of the other side of this partnership.

However, what can be assessed with these TA interviews are, on the one hand, the successes of the projects, namely the implementation of GEPs in all the respective organisations. While this result may not be surprising, given the new eligibility criterion of a published GEP for all higher education and research organisations for Horizon Europe, it remains a fact that in all GenderTIME and several CHANGE partners had their GEPs in place before it was mandatory.

On the other hand, especially the interviews with GenderTIME, TAs showed that the increased awareness and knowledge about gender inequalities changed their perspective profoundly. They all started to include their gender knowledge in their current positions, too. Thus - the interviews showed - it is not gender knowledge and the power of a position alone; a successful TA has to be an open and curious person with social skills to connect various stakeholders within and outside an organisation. Moreover, it certainly takes a huge commitment to the cause of gender equality to become a successful TA, or as one interviewee put it:

"You've got to be tenacious and you got to care. You've got to continuously and doggedly push these things, not in an aggressive way, in a way that demonstrably shows that you believe in the things you are trying to change." (TA_1)

Therefore, it is not enough to include permanent staff in gender projects to co-create sustainable change within their organisations. Transfer agents need the power and knowledge to change things, but mostly they need a strong commitment to gender equality and courage and stamina to master this long marathon with all its hurdles.





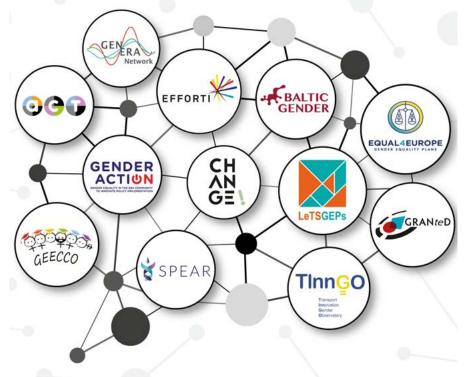
Jennifer Dahmen-Adkins **RWTH Aachen University** Institute of Sociology

How to CoP the German case

nowledge co-creation and knowledge transfer inside and outside of the consortium has been a core aspect of CHANGE right from the beginning of the project. The creation of a community of practice (CoP) in each of the participating countries was considered as a main pillar for sustaining the action impact and exploiting the results for relevant communities. Various different approaches were taken in each country. The German partners – Fraunhofer Institute for Manufacturing Technology and Advanced Materials (IFAM) and RWTH Aachen University, Institute of Sociology - were able to leverage Germany's science and research institutions' high level of participation in EU-funded gender (equality) projects.



Madlen Baumert Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM, Bremen, Germany ©Fraunhofer IFAM





Janne Haack Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM, Bremen, Germany ©Fraunhofer IFAM

To initiate exchange with members of sister projects, the German CHANGErs reached out to other domestic institutions cooperating in gender (equality) projects in order to jointly establish a German CoP and thereby broaden their own project horizons. To do this, they used already existing network contacts with colleagues; they consulted the EU Commission's project database to identify previously unknown German research performing and research funding organisations involved in corresponding projects; the initiating partners also relied on a kind of snowball effect by forwarding the call for participation to colleagues. In September 2019, a first face-to-face meeting took place at the premises of Fraunhofer IFAM in Bremen, where the representatives got to know each other, discussed expectations and exchanged experiences made during their involvement in EU-funded gender projects.

Parts of this text are based on: Dahmen-Adkins, Jennifer and Anke Lipinsky. 2020. "Neues Netzwerk deutscher EU-Projekte mit Genderbezug." Journal Netzwerk Frauen- und Geschlechterforschung NRW (47): 19 ff.

The call for joining the CoP and the first meeting has resulted in a fruitful and regular exchange among the sister projects. Since then, the bi-annual meetings of the network as well as an email distribution list have been essential to learning from each other, to expanding each's own gender competences, to harnessing synergies between the projects. A dialogue arose to refine the formation of opinions on the political context of each institution's own activities in the project or within the scientific institution, and to prepare future cooperation possibilities.

The established network sees itself as an open discussion forum for European gender equality policy and research and its practical implementation in science. The network is open to all institutions based in Germany that are or have been involved in projects with a gender focus from the European Research Framework Programme. Guided by an appreciation for international and transdisciplinary work, the network foregrounds collaborative aspects in competitive contexts such as that of European research funding.

In November 2020, the CoP was even presented as a practical example at the conference on "Impulses for Europe: Equal Opportunities Structures and Diversity in Research" organised by the Federal Ministry of Education and Research, which took place as part of the German EU Council Presidency.

A major follow-up initiative stemming from the CoP took the form of a joint conference held in November 2021 by the German team of the European SPEAR¹ project and co-organised with the German CHANGE team and the German LeTSGEPs² project partners. The three Horizon 2020 sister projects invited national and international gender equality practitioners, researchers and the interested public to explore and share perspectives on gender equality work across various cultural and organisational contexts and to discuss how to achieve sustainable structural and cultural change.

By now, the CoP has successfully established itself and all its partners are very interested in mutual knowledge exchange. Thus, even after the CHANGE project has come to a close, this CoP will continue to exist. Meetings will be hosted by a rotating roster of organisers, continually growing to include new German partners involved gender equality projects, in line with the aims and support of all the partners.



The CoP has successfully established itself will continue to exist."

¹ See https://gender-spear.eu (29.9.2022)

² See https://letsgeps.eu (29.9.2022)

03 JOURNEYS RESISTANCES COMMUNITIES



Czech Republic, Hungary,
Poland, Slovakia and Slovenia.
Some similarities on their way towards Gender Equality?

> Why is it so important to tailor gender equality policies to local contexts?

How can explicit resistance be turned into a vantage point?



Marcela Linková Head of the National Contact Centre for Gender and Science, Institute of Sociology, Czech Academy of Sciences, Czech Republic

Interview with Marcela Linková

Marcela Linková is the head of the National Contact Centre for Gender and Science of the Institute of Sociology (Czech Academy of Sciences, the Czech Republic). Her research focuses on the sociology of gendered organizations, research careers, governance of research and research assessment from a gender perspective. Between 2017 and 2021 she served as the chair of the Standing Working Group on Gender in Research and Innovation under the European Research Area and Innovation Committee (ERAC).

How do you assess the impact of the EC's strategies of:

... financing GEPs through the calls for proposals within European framework programme for research and innovation (Horizon 2020)?

The impact of the EU-funded Horizon 2020 projects to implement gender equality plans (GEP) has been great, in my opinion. Thanks to the various "sister" projects on institutional change, the research and higher education community can benefit on several fronts. Firstly, we have a better understanding of the processes of institutional change for gender equality (GE) as well as of what drives institutional change, how resistance manifests itself and what skills and capacities are needed for such a complex change process. Secondly, we have a range of tools, guidelines and other types of resources that the projects have generated and are publicly available. Thirdly, we now have a community of change agents and practitioners with rich experience to share. Of course, each GEP needs to be tailored to fit each individual institution, reflecting the disciplinary orientation or size, but at the same time there are aspects common to all. Having this community of practice and change practitioners is a huge resource and its importance cannot be overestimated in relation to the new eligibility criterion in Horizon Europe, which the GEPs now are.

... mandatory GEPs in Horizon Europe to overcome political and societal resistance towards gender equality?

It is clear that this new eligibility criterion cannot alone overcome resistance to gender equality. There may even be those who regard this negatively, as a political imposition on the research and higher education sector. There will be those who will want to sidestep, window-dress and, in general, comply without complying. There is a clear risk of policy churn. At the same time, there are institutions that are taking the GEP requirement as an opportunity to start new processes and use it as leverage at the institutional level, and use the process to explain, raise awareness and mobilise support.

To many of us working to advance gender equality in research and higher education, the GEPs are a potential game-changer, of course, if done right. The role of the Commission here is very important. The signal sent with the eligibility criterion is strong, but must be reinforced with follow-up actions. The Commission has already provided a guide; trainings are underway; there is a plan to set up national contact points appointed by the national authorities; and I hope that all this goes forward as guickly as possible. What I see as absolutely crucial, though, are the checks by the Commission on the GEPs. So far, we have very little information about monitoring, and there are several points I want to stress.

Firstly, the information on monitoring must be published immediately so that the institutions know it's real. Secondly, significant numbers of these checks must be performed to make them matter. Thirdly, the checks must be robust and done by GE institutional change experts; they must be done by people who know what a GEP should look like, what an impact pathway to gender equality is, what the impact drivers for successful implementation are, and who won't be willing to play the game of window-dressing. Fourthly, thanks to the EU-funded sister projects, the Commission has contributed to building a community of change agents and change experts, and should harness this expertise. And lastly, these checks must be made to matter; they must contain clear information about sanctions in case of non-compliance.

... involving gender practitioners (people from different scientific disciplines with no GE background) in spreading of the GE principles and their practical application?

We know today that institutional change has some prerequisites without which it cannot succeed. Yellow Window has developed the impact driver model which we took up in the Horizon 2020 Gender-SMART project and combined it with the actor mobilisation model developed by ASDO. This has been further developed in the Horizon 2020 CASPER project. These impact drivers entail these elements that spur institutional change. One of these is using internal gender expertise as a resource. Another one is the capacity and skills for driving institutional change, which includes proficiency in participatory approaches and co-creation techniques, understanding of strategic framing, the capacity to deal with resistance of all kinds, institutional learning and the ability to engage different stakeholders. These are not solely about gender expertise and knowledge but rather the organisational and psychological aspects of institutional change writ large.

One of the lessons learnt, I think, is the importance of co-design and co-creation by a diverse range of institutional actors, but gender expertise must always be present. It is indisputable, though, that bringing together people with diverse backgrounds, diverse institutional positions, different organisational stakes and divergent stakes into the change process, will contribute to the success of the process and to ownership building. It is important to have a diverse group of allies and change ambassadors, but we should insist that the change agents themselves have gender expertise and that the people involved in the wider change group are properly trained and have gender awareness.

What advice would you like to give to other Czech RPOs, just starting to draft their GEPs or with their implementation?

It is really encouraging for us to see the many institutions that really are taking this as an opportunity are indeed taking it seriously and want to do it right. We stress a few things that are key at the beginning. One is the support of top management. Essentially, without this, I don't think it makes sense to start because the risk of total frustration and burnout right at the beginning is real. Second, we stress the need to involve different institutional stakeholders, provide information and communicate internally, so that the ownership of the process is gradually built up and people understand why it is happening, beyond the eligibility requirement. We also stress the need of having support networks, because the change process is hard. For this reason, we have a community for change, which is our national community of practice for people involved in GEP development and implementation or in HR Excellence in Research Award. The community has today over 450 people and, apart from trainings and workshops, the community should also be a place for mutual support, sharing and learning. We are very happy to see this community growing, and I think it won't be a surprise when I say that, since the GEP eligibility criterion was announced, the community has grown fast.



Gabriela Langhammerová Member of the National Contact Centre for Gender and Science, Institute of Sociology, Czech Academy of Sciences, The Czech Republic

Interview with Gabriela Langhammerová

Gabriela Langhammerová is a member of the National Contact Centre for Gender and Science of the Institute of Sociology of the Czech Academy of Sciences. She deals with the issue of institutional change in scientific and research organisations and also with promoting gender equality (GE) through gender equality plans and other means. She manages Community for change, a Community of Practice on national level.

Acknowledgment: Interview questions were discussed with my colleague Hana Tenglerová, gender expert from the National Contact Centre for Gender and Science.

Political and societal resistance towards gender equality

... What is the current political and societal situation in your country in relation to gender equality?

At this moment, most public and media attention is focused at the situation in Ukraine. However, we see that this is also used as a field for discursive battle. including gender as well. There is the case of a Czech pro-life group called the Movement for Life (Hnutí pro život), which has long been striving for restricted abortion rights. This movement stood up against a civil initiative trying to collect emergency contraception for rape victims in Ukraine. It continued advocating for foetal life over a woman's free choice as the Russian troops retreated from occupied territory, leaving behind huge numbers of raped Ukrainian women scavenging for emergency contraception. The main discourse also neglects the fact that women in the Ukrainian army form 1/6 of the soldiers, and the refugees are mainly women, children and the elderly - a precarious and vulnerable group.

... How does this situation reflect in your organisation?

There is an initiative of the Czech Academy of Science aimed at Ukrainian scientists proposing a fellowship to researchers and PhD students who are at risk.

... How did you and your colleagues deal with the resistance experienced while raising the GE issue? Did you have to change your approach?

The situation in the academy and the arguments that are used here vary to a large extent. Research institutions and universities represent conservative environment, and also a highly competitive environment with entrenched hierarchical principles. In many ways, the concepts of the gender equality plan are in direct opposition to the attitudes and strategies currently found in HEIs. A gender equality plan is intended as a participatory document, i.e., everyone involved in the process of creating the GEP has a mandate to disperse the institutional hierarchy by co-creating the content. The cycle of gender equality plan is also a rather short-term document (3-4 years), designed to fit ad hoc needs and requirements of the workers actually involved at the workplace. With regard to prevalent maintaining of the status quo at the HEIs, this can be difficult to grasp.

At the moment, we are in the phase of launching of our GEPs and the debates are dynamic but also constructive. The Czech Academy of Sciences consists of multiple autonomous workplaces, each with its own legal subjectivity, which means that every legal subject within the academy has to draft its own GEP.

... What motivated you to get involved in GE?

The highest motivation is our personal commitment to promote gender equality, especially in the area of science where women are still very underrepresented.

Closing questions

... Have you personally benefitted from your involvement in raising awareness for and advancing the GE topic?

We are not fully aware of any particular benefits. It's certainly gratifying when we can move something forward, when we can help someone. The feeling of doing something meaningful is also important. Not everyone is lucky enough to do something (s)he enjoys and that brings her/him some benefit, and not everyone is lucky enough to help herself/himself.

In terms of CZERA project, we provide support to scientific research and higher education institutions in the Czech Republic and it is great for us to see people who are personally involved in gender equality and its promotion on an institutional level, making the structural change possible for all the employees.





Zoltán Bajmócy
Professor and deputy dean
for scientific affairs,
Faculty of Economics and
Business Administration,
University of Szeged,
Hungary

Interview with Zoltán Bajmócy

Zoltán Bajmócy is a professor and deputy dean for scientific affairs at the Faculty of Economics and Business Administration of the University of Szeged (Hungary). His research focuses on socio-technical, environmental and spatial aspects of sustainability transitions. This embraces the examination of local development actions and policies from the aspects of human well-being, social justice and sustainability. He is one of the three members of the gender equality (GE) core group of the faculty.

Acknowledgement: Interview questions were discussed with my colleagues Zsofia Kürtösi and Judit Juhász. The three of us are the GE core group at our faculty. All the decisions with regard to the GE planning process are made by this group.

Political and societal resistance towards gender equality

... What is the current political and societal situation in your country in relation to gender equality?

Hungary, together with several other post-socialist countries, shows a mixed performance compared to the EU average with regard to GE. The share of women in managerial positions is well above the EU average (42% in Hungary; 34% in EU), but not in top management (9.9% vs. 29.5%). The gender pay gap is higher than the EU average (in 2019 Hungary 18.2% vs EU 14.1%). Legislation in terms of parental leave, child care, etc. basically provides the same opportunities and rights for women and men – but the actual social realisation in this field is characterised by huge differences (just like in other EU countries). We can see very poor representation of women in political positions. The governing right-wing party coalition, with its massive majority for a long time now, propagates traditional gender roles (or expects women to succeed both in their career and as housewives), is openly hostile towards LGBTQ people, and declines to pass the Istanbul Convention. The word "gender" is a taboo in the official state communication. The expression "equality of men and women" is used instead.

... How does this situation reflect in your organisation?

The academic sphere is still very much male-dominated. That is also true for the university on the whole, where about two thirds of the senate members, the deans and the full professors are male. The political discourses infiltrate into the universities, but only partially. While promoting equality has gained attention in certain fields (e.g., students with special needs), the university seems to be reluctant to develop a university-level gender equality plan. The set of available information is very limited, but there seems to be substantial differences among the faculties in terms of gender equality. The Faculty of Economics and Business Administration is probably an outlier by assigning strategic importance to equality and inclusion. However, some of the general trends can be detected even at this faculty, e.g., lower-paid administrative positions are dominated by female colleagues.

... Is the Horizon Europe with its GE requirement not a motivation factor to implement GEP at the university level?

The university (and the Hungarian higher education system) has undergone deep changes in the last two years, in addition to the COVID challenges. This evidently diverted attention from a lot of issues. Nevertheless, a GEP seems to be more of a pressure than a motivation at the university level. In my experience, it is treated as a 'technical issue', which the university must tackle so that participation in Horizon projects can continue. It is likely that by the end of the transition period, the university will have a GEP or a general plan that embraces the required areas. However, this is also likely to be the result of a very brief process, without any real chance for co-creation.

... How did you and your colleagues deal with the resistance experienced while raising the GE issue?

We did not really have to deal with resistance for various reasons. (1) Several further issues related to equality and inclusion had already been introduced through participatory processes we started in 2018. Together with number of faculty colleagues, we began building on experience with civil society organisations and even our civil activism. So, talking about GE-related issues emerged quite naturally. (2) We tried to use a very broad framework when discussing issues of equality, work-life balance or violence with colleagues. We let colleagues define what kind of hierarchies seem to be relevant in these respects (in some cases the oppressive mechanisms were not primarily connected to GE). (3) We did not have to convince the faculty management of the importance and legitimacy of this issue: (a) members of the core group are/were part of the faculty management; (b) external factors, such as Horizon Europe expectations also provided legitimacy; (c) earlier activities in the field of equality and inclusion provided legitimacy for this issue (and the participatory approach) as well.

... What motivated you to get involved in GE?

The members of our core group have various, but still overlapping motivations. One of the most important personal motivations was precisely the opportunity to work together on this topic. In my case, it also involved stepping outside of my comfort zone - being a male in management position, I am always worried about finding the right way and how much I should contribute to this process. We had various further motivations, e.g., our own issues with work-life balance, GE (and in general social justice) as a research interest, internal motivations to bring about change in the organisation, and broadening the spectrum of on-going equality and diversity endeavours.

Questions particularly for Zoltán

... Can you describe the process of GEP co-creation at your faculty?

The process actively builds on previous (participatory) processes regarding the development of a faculty equality strategy and overlaps with other processes (e.g., the development of guidelines and protocols for an inclusive and non-discriminatory learning environment). The GE planning process basically embraced: learning through networking (e.g., with H2020 project CHANGE), collecting hard data, problem identification and goal-setting workshops with faculty colleagues (teaching & administrative staff), discussions with the faculty management. We are creating the first draft of the GEP right now, which will be discussed at different forums (just like earlier equality and inclusion documents): (a) at the committee of equality and diversity, (b) at staff meetings; also providing opportunities for individual feedback from all staff members, (c) at the faculty council. The GEP is scheduled to be on the agenda of the faculty council in May or June.

... Despite the already mentioned reluctance, how are you planning to upscale the GEP implementation of your faculty to the university level?

We put a focus on communicating our equality efforts to the stakeholders and providing visibility for them through the faculty PR activities. This has some indirect influence on other faculties and the university top-management. The consequence is that we are sometimes consulted in connection with university-level activities, or get recommended as "good practice examples" by our partners. However, this does not have a direct effect on university level GE planning. The only direct step we can take is that the faculty management regularly draws attention to the necessity of creating a university-wide GEP through certain forums (e.g. deans' meeting, university-level committees) - to no avail yet.

... What advice would you like to give to other Hungarian RPOs just starting to draft their GEPs or with their implementation?

It seems to be important to carefully tailor the process to the local context. We could not proceed with the GE planning the way we did without all the prior steps taken in the field of equality and inclusion. We found it useful to take one step at a time. With limited resources and time, it is certain small-scale projects we focus on. Our experience is that these small steps may have far-reaching effects, and are very useful to keep the issue alive, and initiate channels through which the organisation can change.

Closing questions

... Have you personally benefitted from your involvement in raising awareness for and advancing the GE topic?

Yes, e.g., an opportunity to cooperate with colleagues with whom we normally would not work together, to take part in discussions with many of the colleagues and to better understand how the organisation works. We (the members of the core group) found that certain events really energised us, e.g., the goal-setting workshop or the attitude of the dean to many of the challenges we presented to him.

... Anything else you would like to add to the theme or share with the readers?

The members of the core group often feel that we lack resources (mostly time) and also knowledge in certain fields (how to create adequate protocols with regards to harassment or bullying). Also, as part of a 'self-defence mechanism', we do not try to solve everything at one go, but try to be patient (also) with ourselves. This of course slows down the process. On the one hand, this may moderate the effects. On the other hand, it seems to be the way to reserve capacity to deal with certain issues in the long run.



Paulina Sekuła Assisant professor at the Institute of Sociology, Jagiellonian University, Poland

Interview with Paulina Sekuła

Paulina Sekuła is an assistant professor at the Institute of Sociology of the Jagiellonian University in Krakow and the Chair of Epidemiology and Preventive Medicine Jagiellonian University Medical College, Poland. Her research interests cover gender equality (GE) in research and academia, public polices and social determinants of health. For a few years she has been involved in projects focusing on structural change in higher education institutions, including H2020 projects GENERA, ACT and MINDtheGEPs. Paulina was also a co-facilitator of the Community of Practice for Gender Equality in Central and Eastern Europe financed by the H2020 project ACT.

Political and societal resistance towards gender equality

... What is the current political and societal situation in your country in relation to gender equality?

Although a legal framework for anti-discrimination and gender equality is present in Poland and includes constitutional and labour code provisions and equal treatment legislation, specific laws on gender equality in higher education and R&I and policy incentives for implementing gender equality measures have not been put in place. Moreover, we are experiencing the rise of an anti-gender movement, political resistance to gender equality interventions and feminist agendas as a part and parcel of democratic backsliding in our country's (e.g., there is even political will to withdraw from the Istanbul Convention on Violence Against Women; public discourse about the "ideology of genderism" which destroys the foundations of the traditional family is very strong).

As a result, the extent of the adoption of GEPs in HEIs and RPOs was, up until recently, minimal. The problem of gender inequality hasn't been perceived to be urgent or requiring immediate action. Management support for gender equality intervention has been lacking, similarly to sustained financial and human resources support for it. Furthermore, the staff engaged in gender equality intervention lacks authority. The situation has been changing with the introduction of GEPs as an eligibility criterion for participation in the Horizon Europe programmes – many HEIs and research institutes in Poland have either already implemented GEPs or are about to do so.

... How does this situation reflect in your organisation?

At our university, a variety of activities for equal treatment have been undertaken by a number of university units. However, they are not yet systemic; that is, there is no anti-discrimination policy adopted, implemented or pursued consistently. A GEP is under construction. However, I assess the awareness and knowledge of members of our academic community (including representatives of university authorities) about the mechanisms of discrimination and the scale of unequal treatment as insufficient.

... How did you and your colleagues deal with the resistance experienced while raising the GE issue? And how are you dealing with it nowadays? Did you have to change your approach?

We started raising GE issues at our organisations with the H2020 project GENERA, which aimed to develop GEPs tailored to the needs of physics institutes and departments. We gathered, analysed and presented data to provide evidence on instances of gender inequality. We involved various actors, including the organisational management, in the process of designing our GEP to create a sense of ownership, a sense of responsibility. There was some resistance from administrative units to make some data available. But we looked for top-down support and asked for the management to get involved. We also organised events to raise awareness.

Since the introduction of GEPs as eligibility criteria, it has been both easier and harder to implement GEPs. Easier, because organisational leaders became convinced that the plans were inevitable and that getting access to sex-disaggregated data is part of the process. Harder, because building alliances and designing a GEP tailored to the organisational needs is a lengthy process, which needs to be accelerated, however. It will be a challenge to make that change systemic and to embed solutions in the very organisational structure and practices.

... What motivated you to get involved in GE?

As a sociologist, I had studied gender inequality in public sphere for a couple of years, so it was my "natural" research interest. Then I was invited to participate in European structural change projects focusing on gender equality in research and academia. Those projects allowed me to not only continue with research but also put that knowledge into practice.

Questions particularly for Paulina:

... Paulina, your university coordinates the "Community of Practice for GE in Central and Eastern Europe (CoP GEinCEE)". How do you assess the impact of this CoP for overcoming political and societal resistances towards gender equality in CEE?

Testimonies given by the GEinCEE CoP members demonstrate that having effective tools to overcome resistance towards gender equality interventions was needed. Argumentation strategies for gender equality were tackled in the CoP's trainings and the community itself has been recognised as a safe space to discuss sensitive and difficult issues, including resistance to change. The CoP's meetings provided opportunities to both share good practices in dealing with resistance, already tested by some partners, and receiving emotional support by those who face reluctance or hostility towards gender equality interventions. But even if the CoP was recognised as a safe space for sharing difficult situations, its effectiveness in managing individual cases of resistance proved so far limited.

First accounts of the CoP members, collected after the European Commission announced introducing a GEP as eligibility criterion in the application for the Horizon Europe programme, suggest that this decision should trigger changes, also in those partner organisations where organisational resistance had previously prevented any initiatives. However, the doubts have been raised whether the requirement to have a GEP would help to improve organisational cultures of academia and research institutes, or its effects would rather be limited to signing a paper and ticking boxes on a checklist.

... What achievements of your CoP are you most proud of?

I would say that the CoP proved to be intermediary support structure, allowing for combining isolated efforts to implement structural change in the region and providing local experts with some extra-institutional embedding of their activities, as well as strengthening their personal and collective agency. In this context, it allowed for effective experience and practice exchange, capacity building and it took steps to gather the experience and knowledge on gender equality and gender equality interventions in higher education institutions and research organisations from the region, which previously was missing. Common initiative to conduct a survey on gender equality status quo (with the GEAM tool developed under the H2020 ACT project) was an important achievement for us.

... What advice would you like to give to other Polish RPOs, which are just starting with the drafting of their GEPs or with their implementation?

It is important to find alliances throughout the whole organisation and engage in the process both the organisational leaders and representatives of various stakeholders (academic and administrative staff, doctoral students, employees at different career stages) to include a variety of experiences and build sense of ownership. It is important to define shortand long-term objectives to know where you are going, but it is equally important to identify means of achieving them. Implementing GEPs, introducing structural change is a lengthy, comprehensive process that needs expertise and resources, both financial and human.

Closing questions

... Have you personally benefitted from your involvement in raising awareness for and advancing the GE topic?

I became more knowledgeable about the causes and manifestations of gender inequalities in research and academia. I met wonderful people, gender equality advocates and experts, passionate about changing research organisations to become better places to work in. With the involvement in gender equality interventions at my organisation I gained a sense of ability to shape the world we live in, self-efficacy.

... Anything else you would like to add to the theme or share with the readers?

Everything has been said, thank you.



Veronika Mešková Project manager, responsible for the GEP implementation at University of Žilina (UNIZA), Research centre, UNIZA, Slovakia

Interview with Veronika Mešková

Veronika Mešková is a project manager at the University of Žilina (Slovakia). She has finished her studies in economics and management. Veronika has got working experience from a publishing house and from a human resources department of an IT corporate. In relation to gender equality (GE), Veronika is responsible for the GEP implementation at her university. University of Žilina is one of the implementing organisations of the H2020 project CHANGE.

Political and societal resistance towards gender equality

... What is the current political and societal situation in your country in relation to gender equality?

Gender equality is not a topic in Slovakia. One of the signs is that the new government renamed the "Department of GE and of the Equal Opportunities" at the ministry of labour to the "Department of Equality of Men and Women and of Equal Opportunities" in 2020. At the end of 2021, Slovakia endorsed "The Ljubljana Declaration on Gender Equality in research and Innovation"; however, the ministry did not publicise it.

In my opinion, the two given examples are a manifestation of a more deeply rooted problem. And this lies in the understanding/misunderstanding of the term gender and in the created conflict among traditional values (represented by the value of the traditional family) and gender equality (perceived by some to be an "imported topic" from the EU). From my experience, the most common emotion when I say that I deal with gender equality is confusion. People do not know what to think about it. As the 'conflict' is on the level of values, they are very cautious towards it. Some of them ask me a bit ridiculously: "Is this needed?" Overall perception is that women in Slovakia are not discriminated against and, therefore, there is no problem nor any motivation to deal with the issue. Another important aspect is the European dimension (especially in the R&I sector), which has been strengthened through the introduction of the GEP as an eligibility criterion for Horizon Europe. Slovak universities have started drafting their GEPs, a bottom-up approach is to be recognised towards the ministry of education.

... How does this situation reflect in your organisation?

Once I approached a male employee from higher university management to become our transfer agent. He replied to me that he needs time to consider if this role would be in line with his values. This was a very concrete example. In order to provide a bigger picture for readers, I would say that the perception of GE at university copies the perception of the society. And this consists in denial of the meaningfulness of the topic.

... How did you and your colleagues deal with the resistance experienced while raising the GE issue? And how are you dealing with it nowadays? Did you have to change your approach?

From the beginning, we spoke directly about gender equality despite the fact that we were aware of the topic sensitivity and even its controversy, which could lead to resistance to our activities. Over time we have added to this communication pattern an incorporation of GE into broader themes, e.g., unconscious prejudices. The ratio behind was the respect to the local and institutional circumstances. The project should serve the needs of university, lead to the improvement of working conditions and generally its environment and not to be perceived as a useless project with a topic forced by the EC.

In case we encounter any resistance, which is manifested verbally or on the level of the processes, we try to explain our views and provide arguments. From our experience, explicit resistance can turn out to be a chance for further, even fruitful discussion. Of course, implicit resistance is much more complicated and is the 'behind the scenes' factor which slows down and disables change.

... What motivated you to get involved in GE?

I would say I have always perceived the male-female relations in society sensitively. The lack of fairness was the factor which has become the driving force for my involvement in this topic. Before the CHANGE project, I had written a blog on sexist advertisements, which are, in contrast to many western European countries, unfortunately still very common here. And as a university employee, I have noticed the unequal representation of men and women, especially in higher managerial positions. Our university, the principle STEM university, was and still is dominated by men. According to the SHE Figures, Slovakia has quite a high number of female researchers (in 2018: 41,2%; EU-27 average: 32,8%), but the glass ceiling index (1,74) was above the EU average (1,58).

Questions particularly for Veronika:

... Veronika, you started your work as CHANGE agent as "newbie" in gender equality, how would you describe your journey?

At the beginning, there was just my interest in the topic. I needed to gain the theoretical knowledge in order to be able to understand the wider context. I have learned that some phenomena I have encountered at my university are not UNIZA-specific and that for some of them there are even terms in scientific literature. The acquired knowledge was gradually structured. It helped me to strengthen my argumentation towards the GE objectors.

... Looking back on four years of CHANGE at UNIZA, what would you consider to be your most important successes?

The most important success is for sure the university GEP approved by the management. This process was accelerated thanks to the already mentioned GE requirement of Horizon Europe. But I am proud also of smaller achievements, like amendments of the collective agreement related to the working conditions, which have been made based on the recommendations of the CHANGE team. We used the data from the employees' survey, one of the project activities. I can remember one colleague of mine, a civil engineer, telling me: "Well done and thank you." I think only few people outside of our team expected at the beginning of the project that it could have a positive practical impact on all the employees.

... What advice would you like to give to other Slovak RPOs just starting to draft their GEPs or beginning implementation?

I would recommend using a step-by-step approach and to concentrate on specific actions. Even people who would not openly support the GEP implementation at the university as such can be supportive in particular areas, e.g., work-life balance measures, actions to attract girls to study STEM, popularising the research work, etc. In this way, allies from various departments, in different positions can be won over. At UNIZA, the informal network of CHANGE ambassadors has been created with meetings upon request. It's advantageous to have allies in influential roles, transfer agents, as we call them in the CHANGE project. And to network. The topic of the discussions doesn't have to be necessarily the gender equality every time. Experience proves that good interpersonal relationships can help to speed up the process and implement actions.

Don't be afraid to reach out for help. On the national level, you can use the consultancy service provided on GEP drafting by the Slovak Centre of Scientific and Technical Information. You can approach colleagues implementing GEPs at other universities or even colleagues from transnational communities of practice. Paulina Sekula is one of the respondents of this handbook. UNIZA is not an official member of the ACT CoP, in which Paulina is actively involved. Nonetheless, UNIZA participates in some their events. Hereby, I would like to highlight the importance of this cooperation and mutual sharing. Participation in their event in Krakow in 2019 was crucial for me as a person responsible for GEP implementation at my university. Because I found myself in the circle of the people facing the same problems as me. For sure, it is inspiring to look at, e.g., Germany which has got over 20 years of experience in GE. On the other hand, such a long experience can be somehow discouraging for beginners. Therefore, activities aimed at countries less advanced in GE and/or territorially specific are really important.

Read literature on resistance to structural change in institutions. It will help you to enhance your understanding of your situation, to stay focused and to avoid frustration.

If you are lacking in financial resources to initiate GE measures, try to search for suitable call for proposals and apply for it.

Closing questions

... Have you personally benefitted from your involvement in raising awareness for and advancing the GE topic?

I have learned a lot about GE, how the internal power structures work, even about myself. It increased my visibility. I feel honoured and thankful that we had the opportunity to start with the GEP implementation in the framework of the European project. It provided us with resources: first of all, with knowledge that could be consulted along the way when necessary; with inspiration, when we were looking at the progress our project partners have achieved; and, last but not least, with the financial resources.

... Anything else you would like to add to the theme or share with the readers?

I think everything has been said. Perhaps just fingers crossed for all of us engaged in GE in order to move it forward.



Ana Rotter Senior research associate, National Institute of Biology (NIB), Slovenia

Interview with **Ana Rotter**

Ana Rotter is a senior research associate and trade union representative at the National Institute of Biology (NIB) in Slovenia. Her research areas are marine biotechnology and statistics, as well as science communication and project management and marine biotechnology. Ana is keen on gender equality (GE); she is the local lead of the H2020 project CHANGE.

Political and societal resistance towards gender equality

... What is the current political and societal situation in your country in relation to gender equality?

Gender is mentioned in all national legislative acts (e.g., Scientific Research and Innovation Activities Act) and has been touted at high-level events during our recent EU Presidency (1.7. - 31.12.2021). Additionally, 2021 was important as all research and academic organisations needed to formally define and endorse their GEPs. However, in practice, many individuals still see the topic of gender as irrelevant and out of context.

... How does this situation reflect in your organisation?

In the period of CHANGE project proposal writing and since its formal launch, the NIB has had three directors. This often meant that the topic of gender was pushed back in the agenda due to other urgent commitments. However, the Covid-19 pandemic represented an opportunity where health, well-being, work-life balance and gender suddenly became important to maintain work productivity and personal relations. In addition, the process of endorsing a GEP was another opportunity to effectively implement positive structural changes. Finally, soft skills and topics such as communication, burnout, research integrity, unconscious bias have also found their place in work performance. Thus, the current leadership composition in the institute accepts and wants to implement new organisational changes that would increase the overall well-being.

... How did you and your colleagues deal with the resistance experienced while raising the GE issue? And how are you dealing with them nowadays in the phase of GEP implementation? Did you have to change your approach?

The most important things are the soft communication and the organisation of trainings and informal events/activities. Employees are embracing the possibilities to acquire new knowledge that could empower them and allow them to build informal networking opportunities. The resistance is mostly seen at the middle management level, as the topic of gender is still being considered irrelevant or merely an administrative issue. There is also a visible intergenerational gap where the early career employees are more open to changing the culture and raising awareness.

... What motivated you to get involved in GE?

In 2011, I received the National L'Oreal for women in science award. This got me thinking about why awards that are gendered are needed in the first place. I suddenly started realising that there is indeed a problem (slower promotion, penalisation of young women that admit to being ambitious, office housekeeping that is always assigned to female colleagues, etc.). Stimulated by our former director, I got involved in the COST Action genderSTE (gender in science, technology and engineering) and this is where my learning process started. Every chance I had, I also used the opportunity to share the knowledge and implement changes in practice. This was also enabled by my position as the trade union representative.

Questions particularly for Ana:

... Ana, you started your work as CHANGE agent based on previous experiences with gender equality. How would you describe your journey in the CHANGE project?

CHANGE has been a fantastic opportunity that allowed me to deepen my knowledge on equal opportunities and diversity. Additionally, the project enabled me to organise events (for which typically we lack resources) and widen my collaborative network (nationally and internationally). Moreover, my involvement in CHANGE gave me a lot of freedom to design and tailor the messages and events so they would reach the target audience most effectively. I see now my involvement in these topics as a parallel career development and I would be happy to have the opportunity to continue formally engaging in future projects and initiatives.

... Looking back on four years of CHANGE at NIB, what would you consider to be your most important successes?

When I started getting interested in the topic of diversity, gender and inclusion, a senior colleague advised me to let it go as it would ruin my career. I am happy to say that this narrative did not hold and that I am considered to be an experienced practitioner now, willing to help, collaborate and disseminate knowledge. The culture of inclusion of topics covered within CHANGE is now more open in our institute.

... What advice would you like to give to other Slovenian RPOs just starting to draft their GEPs or with their implementation?

Soft communication: take time to speak to people, do not only complain, organise out of the box events (card games, photography sessions, etc.).

Closing questions

... Have you personally benefitted from your involvement in raising awareness for and advancing the GE topic?

It has allowed me to build a small team of colleagues within my institute; I have become more knowledgeful and experienced; my communication skills improved; and my network of collaborators has expanded.

Also, it seems that some type of formal commitment to gender and diversity will be endorsed by our top management and for now I am happy to say I will continue to monitor and design internal trainings and best practices.

... Anything else you would like to add to the theme or share with the readers?

The involvement in such projects should be maintained, provided that you try to implement theory in practice and you live what you discuss in trainings. Let's hope that all our ideas and knowledge will be capitalised in the future, but this is only possible through future financing.











