OVERCOMING THE CHALLENGE OF STRUCTURAL CHANGE IN RESEARCH ORGANISATIONS

A REFLEXIVE APPROACH TO GENDER EQUALITY

EDITED BY
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OPEN ACCESS BOOK

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Emerald Publishing Limited
Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2022

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

ISBN: 978-1-80262-122-8 (Print)
ISBN: 978-1-80262-119-8 (Online)
ISBN: 978-1-80262-121-1 (Epub)

Contents

List of Figures and Tables

Figures

Tables

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List of Abbreviations

AAASS	American Association for the Advancement of Slavic Studies
AC	Associated Country
ACT	Communities of PrACTice for Accelerating Gender Equality and Institutional Change in Research and Innovation across Europe, Horizon 2020 funded project
ARACIS	National Agency for Quality Assurance in Higher Education (Romania)
BA	Bachelor
CBW	Capacity Building Workshop
CELAP	Centre for Ethics, Law and Applied Philosophy
CESEE	Central, Eastern and Southeastern Europe
CGE	Committee for Gender Equality
CoE	Council of Europe
CoP	Community of Practice
CPGE	Preparatory classes for the Grandes Écoles [Classes Préparatoires aux Grandes Écoles]
CRUI	Conference of Italian University Rectors [Conferenza dei Rettori delle Università Italiane]
CSO	Centre for Women's Studies
CSR	Corporate Social Responsibility
CTI	Commission for Engineering Titles [Commission des Titres d'Ingénieurs]
CUG	Unique Guarantee Committee for [Comitati Unici di Garanzia] (Italy)
EC	European Commission
ECM	École Centrale de Marseille
EIGE	European Institute for Gender Equality
ELIAMEP	Hellenic Foundation of European and Foreign Policy (Greece)
ERA	European Research Area
ERAC	European Research Area and Innovation Committee
ETAN	European Technology Assessment Network
EU	European Union
EU13	Central-Eastern and South-Eastern European Countries – 'new EU Member States'

EU15	Northern and Western European Countries – 'old EU Member States'
FASPER	Faculty for Special Education and Rehabilitation
FESTA	Female Empowerment in Science and Technology Academia, FP7-funded project
FGB	Fondazione Giacomo Brodolini (Italy)
FP7	7th Framework Programme, EU research-funding programme (2007–2013)
FRA	European Union Agency for Fundamental Rights
FRRB	Fondazione Regionale per la Ricerca Biomedica (Italy)
GAMe	Giovani Ambasciatori Mediterranei [Young Ambassadors of the Mediterranean]
GBV	Gender-based Violence
GE	Gender Equality
GEA	Gender Equality Audit
GEAR	Gender Equality in Academia and Research (tool)
GEC	Groupe des Écoles Centrale
GEP	Gender Equality Plan
GM	Gender Mainstreaming
GSGE	General Secretariat for Gender Equality
H2020	Horizon 2020, EU research-funding programme (2014–2020)
HEEI	Higher Education Engineering Institution
HEI	Higher Education Institution
HR	Human Resources
IHS	Institute for Advanced Studies (Austria)
IRO	Rules of Internal Operation
IT	Information Technology
IW	Institutional Workshop
LERU	League of European Research Universities
MA	Master
MS	Member States
MW	Michelangelo Workshop
NAP	National Action Plan
NEET	Not in Education, Employment or Training
NGO	Non-Governmental Organisation
NSF	National Science Foundation (USA)
NW	National Workshop
OSF	Open Society Foundation
PAP	Positive Action Plan
PhD	Doctor of Philosophy
PI	Principal Investigators
R&I	Research & Innovation
RFO	Research-Funding Organisation
RIF	Research and Innovation Foundation (Cyprus)
RMEI	Réseau Méditerranéen des Ecoles d'Ingénieurs et de Management
RPO	Research-Performing Organisation

SDG	Sustainable Development Goal
SDG5	Sustainable Development Goal 5
SiS	Society in Science
SNSPA	National University of Political Studies and Public Administration [Şcoala Naţională de Studii Politice şi Administrative din Bucureşti]
STAGES	Structural Transformation to Achieve Gender Equality in Science, FP7 funded project
STEM	Science, Technology, Engineering, Mathematics
SwafS	Science with and for Society
TARGET	TAking a Reflexive approach to Gender Equality for institutional Transformation, Horizon 2020 funded project
TEU	Treaty of the European Union
TFEU	Treaty on the Functioning of the European Union
UB	University of Belgrade (Serbia)
UH2C	Université Hassan II Casablanca (Morocco)
UN	United Nations
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNITWIN	University Twinning and Networking Programme

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About the Editors

Angela Wroblewski has been a Senior Researcher at the Institute for Advanced Studies in Vienna since 1999. She is a trained sociologist and has a background in the field of gender studies in academia, including evaluations of equality policies and women-only programmes. Since 1999, she has been involved in research and evaluation projects with a focus on equality policies and diversity at universities and research institutions and has also conducted research projects focusing on students and academics with disabilities. She coordinated the H2020 project TARGET and is involved in GENDERACTION where she is responsible for the monitoring of the implementation of ERA Roadmap Priority 4 in Member States. She is active in international networks focusing on gender equality in higher education such as the Women in Higher Education Management Network.

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Massimo Guarascio has been a former Full Professor and a Senior Lecturer at the Faculty of Civil and Industrial Engineering at the University of Rome 'La Sapienza' since 2015, where he has worked as Full Professor since 1996. He has also served as Chairman of the Safety and Civil Protection Engineering degree course since 1999 and has extensive teaching experience across Europe and beyond. Furthermore, he is a Former Member and Vice-president of RMEI (Network of Mediterranean Engineering Schools). Currently, he supports GAMe (Young Ambassadors of the Mediterranean) as Coordinator, facilitating networking activities and student initiatives.

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Acknowledgements

As editors we would like to thank the members of the TARGET consortium for their commitment to the project and willingness to engage in a reflective process. We also would like to thank the members of the TARGET advisory board for their constant support and their insightful and constructive feedback.

The TARGET project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 741672. The opinions expressed in this document reflect only the author's view and in no way reflect the European Commission's opinions. The European Commission is not responsible for any use that may be made of the information it contains.

Introduction

Angela Wroblewski and Rachel Palmén

Abstract

This chapter provides the background and relevant policy context information necessary to understand the approach to development and implementation of tailored gender equality plans provided by the TARGET project. It describes the development of European gender equality polices in research and innovation (R&I) since the 1980s and experiences with early structural change projects. TARGET refers to these experiences and aims at providing an innovative approach to overcome challenges towards gender equality, especially for research organisations located in countries that have been classified as rather inactive when it comes to gender equality policies in R&I. The chapter closes with an outline of the structure of the book and its individual chapters.

Keywords: Gender equality; gender quality plans; European Research Area; research funding organisations; research performing organisations; higher education; South-East Europe

Background and Policy Context

As stated by Caprile et al. (2012) research approaches and policy debates on gender equality in research have evolved substantially over recent decades. In the 1980s, policy concerns in European and other Western countries were mainly focused on the recruitment of women, while research concentrated on gendered socialisation – how individuals internalise 'feminine' and 'masculine' roles that shape their educational and professional choices from an early age. The findings of such research

Overcoming the Challenge of Structural Change in Research Organisations: A Reflexive Approach to Gender Equality, 1–11

doi:10.1108/978-1-80262-119-820221001

emphasised that young women were discouraged from science by deeply rooted ideas about it being a 'masculine' field. Women were likewise said to be less professionally ambitious than men and given to prioritise family over career. Overall, the explanations for the underrepresentation of women in research were sought outside research and research institutions (Stolte-Heiskanen, 1991).

The 1990s witnessed increasing criticism of this approach. While the policy concerns gradually moved from entry and qualification issues to retention and career advancement, research shifted from socialisation to organisational approaches (Cronin & Roger, 1999; Glover, 2001). It began to focus increasingly on research organisations and their implicit norms, standards, institutional practices and power relations. This approach was reinforced in the late 1990s by two major 'scandals': an article by Wennerås and Wold (1997), which provided evidence of sexism and nepotism in the peer-review system in Sweden, and a report by the Massachusetts Institute of Technology (MIT), which publicly admitted that they had given lower pay and fewer resources to female scientists than to male scientists of equal seniority (MIT, 1999).

The European Technology Assessment Network (ETAN) report (ETAN, 2000) pleaded for an end to patronage and the 'old boys' network' in European academic institutions, the implementation of greater transparency and fairness in recruitment and assessment procedures, and the modernisation of human resource management. The core message was that the excellence of research in Europe was being compromised by patronage, institutional discrimination and old-fashioned approaches to human resource management. Moreover, evidence from the United States and Europe demonstrated that taken alone, affirmative action measures supporting women to pursue research careers are insufficient to make real change happen. Such measures may be highly beneficial for individual researchers, but institutional constraints and implicit norms and values remain largely unchanged (Caprile et al., 2012).

This led to a shift in focus towards more systematic approaches to addressing the deeply embedded structures of inequality through the promotion of change in research organisations. In the European Union (EU), support for structural change has been progressively embedded in research and innovation (R&I) policies. Since 2007, the successive FP7 'Science in Society' (SiS) calls and projects have evolved from programmes supporting women researchers to programmes aiming at institutional or cultural change in research and higher education organisations. The implementation of the gender mainstreaming approach in science and research initiated another policy shift. Policy debates now emphasised the need to combine organisational measures with efforts to overcome gender bias in knowledge production, that is, to enhance scientific excellence by mainstreaming sex and gender analysis in basic and applied research (EC, 2020b; Schiebinger, 2008). Gender mainstreaming in research should extend not only to the research organisations but also to the content of research: it should include actions that improve the quality of the research process and methods by increasing awareness of the need to consider whether a potential sex and/or gender dimension is relevant and, where relevant, requesting the integration of sex/gender analysis into the design, implementation, evaluation and dissemination of the research.

The shift from 'supply side' to 'demand side' approaches, that is, from 'fixing the numbers of women' to 'fixing organisations', is thus further complemented by approaches aimed at 'fixing knowledge'. The 2012 report on structural change in research organisations (EC, 2012a) adopts this comprehensive approach and encourages research organisations to modernise their institutional practices and culture to tackle five key problems:

- opaqueness in decision-making processes with the associated phenomenon of 'old boys' networks and patronage;
- apparently gender-neutral institutional practices inhibiting women's career opportunities;
- unconscious gender bias in assessing excellence and particularly in peer-review processes;
- wasted opportunities and cognitive errors in knowledge, technology and innovation stemming from a neglect of sex and gender analysis;
- inadequate implementation of EU directives on gender equality in the labour market.

The European Commission (EC) supported the implementation of comprehensive gender equality policies at the institutional level by funding specific structural change projects and providing guidelines and tools like the Gender Equality in Academia and Research (GEAR) tool from the European Institute for Gender Equality (EIGE, 2016; for an overview of projects and tools see Ferguson, 2021). In addition to this concrete support for organisations, the EC pursued the integration of gender equality objectives into European science and research policy. In the last decade, the European Research Area (ERA) has formulated gender equality and gender mainstreaming in R&I as one of its six priorities (Council of the European Union, 2012; EC, 2012b). The objective is to foster scientific excellence and a breadth of research approaches by fully utilising gender diversity and equality and avoiding an indefensible waste of talent. Member States were asked to develop policies that address gender imbalances particularly at senior levels and in decision-making and that strengthen the gender dimension in research. Member States and Associated Countries should likewise initiate gender equality policies in research performing organisations (RPOs) and research funding organisations (RFOs). They should also monitor the effectiveness of such policies on a regular basis and adjust measures as required. In September 2020, the EC released the 'A New ERA for Research and Innovation' Communication, which reinforced its commitment to gender equality to strengthen European R&I potential (EC, 2020a). The Council of the European Union also formulated a strong commitment to gender equality in R&I with its conclusions from December 2020 and May 2021. These focus on gender equality in the context of research careers as well as the development of inclusive gender equality plans (GEPs) at RPO level, which also address the gender dimension in R&I. Furthermore, the first strategic plan for Horizon Europe considers gender equality as a crosscutting priority and foresees supporting actions strengthening the ERA through the promotion of inclusive gender equality (EC, 2021).

Although there has been a political commitment to pursue gender equality objectives at European level for more than a decade, comparative studies show differing levels of engagement as well as divergent interpretations of gender equality at national level (Lipinsky, 2014; Wroblewski, 2021). An analysis of the implementation of national gender equality policies in R&I shows the limitations of the existing steering instruments (ERA Roadmap, ERA progress reports), which do not provide incentives to increase engagement in gender equality for countries that are relatively inactive (Wroblewski, 2021). The analysis shows a significant variation of approaches to gender equality in R&I between countries. While gender equality policies in Western and Northern European countries are based on the three-dimensional gender equality objective (fixing the numbers, fixing the institution, fixing the knowledge), former socialist countries interpret gender equality as gender balance in R&I in general and in top positions specifically. The latter implies that institutional change and the integration of the gender dimension into research and teaching content are not defined as priorities. This gap in national R&I policies gains additional relevance as the analysis also highlights a strong and positive correlation between gender equality and excellence or innovation indices at national level. This signifies those countries in which a high share of RPOs have a GEP the excellence and innovation scores are higher compared to countries without institutional gender equality policies. This might also affect the future access to European research funding as GEPs are now becoming an eligibility criterion (EC, 2021). Consequently, it seems to be important to avoid a widening gap between experienced and inactive countries with regard to gender equality in R&I and to support less experienced countries in developing gender equality policies (GEECCO & TARGET, 2021). Experiences with the implementation of the ERA Roadmap (2016–2020) also showed that R&I policy at national level might change regarding gender equality. For example, Greece further developed its gender equality policy in R&I in recent years by introducing new policies supporting structural change in universities (see Anagnostou in this volume).

This complex situation raises some difficult questions: How can approaches to gender equality in R&I be geographically inclusive yet promote a shared progressive understanding and policy approach? How can policy approaches and concepts developed at the European level – be made relevant and adapted to local contexts? Northern and Western European countries started a discourse on gender mainstreaming more than 20 years ago, and this has also led to a shared understanding of gender equality in R&I, which focuses on three main gender equality objectives – fixing the numbers, fixing the organisation and fixing the knowledge (Schiebinger & Schraudner, 2011). The countries where TARGET implementing organisations are located did not participate in this process and have different political and historical currents that shape interpretations of gender equality and subsequent actions. Consequently, in these countries there is a lack of support structures and resources for organisations that are interested in developing comprehensive gender equality policies. The coincidence of a lack of national gender equality discourse and a lack of political commitment produces a difficult situation for organisations aiming at structural change – whether

out of choice or due to external requirements (e.g. from funding or publishing organisations).

Given this challenging context, TARGET aimed at supporting implementing partners to adopt a context-sensitive three-dimensional objective of gender equality in R&I, to develop a tailored GEP and to contribute to a national discourse on gender equality in R&I.

The TARGET Project

The TARGET project – TAking a Reflexive approach to Gender Equality for institutional Transformation – was funded under the EU's Horizon 2020 R&I programme under grant agreement No. 741672. The TARGET approach is based on experiences gained with previous structural change projects and aimed at going beyond the formal adoption of a gender equality policy by emphasising an *iterative and reflexive process* towards equality at the institutional level as well as the establishment of a *community of practice* (*CoP*) for gender equality within the institution. Actual change is the result of increased institutional willingness and capacity to identify, reflect and address gender bias in a sustained way. The approach is based on a three-dimensional gender equality concept. The GEP aims to achieve a gender balance in all fields and decision-making, the abolishment of structural barriers for women's careers and the integration of the gender dimension into research content and teaching.

TARGET has been successful because all partners followed a cyclical, evidence-based and reflexive approach when developing their GEPs. The process started with an audit to analyse the status quo regarding gender equality. The audit referred to gender-disaggregated administrative data (e.g., regarding human resources and students as well as research output and teaching) but also considered strategic documents, processes, existing policies and structures. Most implementing partners have been successful in linking the GEP to ongoing institutional reforms or restructuring processes (e.g., digitalisation processes, establishment of a new human resources policy, revision of the mission strategy). In other cases, implementing partners were able to adopt gender equality policies of high relevance for the institution – such as the adoption of an anti-sexual harassment protocol. By doing so, gender equality became mainstreamed within the institution instead of being positioned as a niche and remaining somewhat isolated. This embedding of the GEP has also been supported by the establishment of CoPs, which resulted in the involvement of a broad range of internal and/or external stakeholders – not only gender experts but also key players in the institution (e.g., human resource managers, information systems managers) – and external strategic stakeholders (e.g., policymakers) in the GEP process. Based on the audit, gender equality priorities and objectives have been defined. These priorities and objectives as well as concrete policies have been integrated into the GEPs. In addition, a monitoring process was developed, which contains context indicators as well as information about policy implementation (input and output indicators). Monitoring results served as the starting point for reflection on developments, successes and failures in the context of gender equality.

TARGET provided a specific tool for each of these steps (a Gender Equality Audit Tool, Guidelines for the Development of a Targeted GEP, a Monitoring Tool and Guidelines for Self-Assessment, which are available for download at www.gendertarget.eu). Supporting partners provided assistance in tailoring the tools to the respective institution's needs. This tailored support was essential for two reasons: (1) implementing partners formulated a clear commitment to gender equality but did not have specific experience in the field prior to TARGET, and (2) implementing partners are located in countries that have been classified as rather inactive regarding gender equality in R&I (e.g. Lipinsky, 2014; Wroblewski, 2021).

In concrete terms, the four-year (2017–2021) TARGET project supported seven organisations in developing and implementing a reflexive gender equality policy. These included two RFOs (Fondazione Regionale per la Ricerca Biomedica (FRRB), Italy; Research Innovation Foundation (RIF), Cyprus), one accreditation agency (National Agency for Quality Assurance in Higher Education (ARACIS), Romania), two universities (University of Belgrade (UB), Serbia; Université Hassan II Casablanca (UH2C), Morocco), one non-university research institution (Hellenic Foundation of European and Foreign Policy (ELIAMEP), Greece) and a network of engineering schools in the Mediterranean basin (Réseau Méditerranéen des Ecoles d'Ingénieurs et de Management (RMEI)). The non-profit research institute NOTUS (Spain) and the Fondazione Giacomo Brodolini (FGB, Italy) acted as supporting partners, and the Institute for Advanced Studies (IHS, Austria) as project coordinator. Due to the multiplier effect related to research funding and accreditation or their roles as think tanks (ELIAMEP) or large state universities which may become pioneering institutions for gender equality in their country, the implementing organisations in the TARGET project all have enormous potential to contribute to the national discourse on gender equality in R&I in countries with limited corresponding gender equality policies.

This volume aims at summarising and reflecting on the experiences of implementing the TARGET approach from different perspectives. It combines the reflections of implementing organisations and supporting partners, institutional and cross-sectional viewpoints as well as theoretical and applied perspectives.

Structure of the Book

The volume comprises three sections. The three chapters in the first section – 'Theoretical and Conceptual Framework' describe the theoretical background to the TARGET approach to GEP development and implementation as well as the main conceptual elements used.

Angela Wroblewski and Rachel Palmén outline the TARGET approach to GEP development and implementation for research organisations. They describe research organisations as being characterised by a dual logic – the organisational logic and the academic logic. They see the fact that gender equality policies often refer to the organisational logic but do not challenge academic practices as one of the main barriers to effective GEPs. Referring to the dual logic and to practice theory enables a discussion of the paradoxical phenomenon that the pace of reduction of gender imbalances remains slow despite the successful

implementation of gender equality policies because relevant practices embedded in the academic logic remain unchanged. They present reflexivity as a key concept that enables a linkage of the two often conflicting logics and the CoP as a key tool that supports reflexivity.

Reflexivity is also a topic taken up by Angela Wroblewski and Andrea Leitner, who discuss the relevance of monitoring for a reflexive gender equality policy. They argue that an evidence-based and cyclical approach to GEP development and implementation opens up space for reflexivity. Members of the CoP should reflect on recent developments towards gender equality – including successes as well as failures – based on monitoring results in a moderated process. This contributes to the further development of gender equality polices, the building up of gender competence among relevant stakeholders as well as a gender equality discourse within the organisation.

The third conceptual chapter focuses on the CoP and its relevance for a reflexive gender equality policy. Rachel Palmén and Maria Caprile reflect on the experiences gained with implementing CoPs in TARGET organisation from the perspective of a supporting partner. They examine the literature on CoPs and structural change for gender equality in R&I organisations and make reference to the different experiences of the TARGET CoPs. The authors examine whether and how a CoP approach has been a useful vehicle for GEP development and consider how the different configurations of internal and external stakeholders within the CoPs have impacted GEP implementation. They also discuss the TARGET experiences of CoPs for GEP implementation in relation to the three key CoP concepts – domain, community and practice.

The chapters in the second section – 'Substantive Issues of a Reflexive Gender Equality Policy' – each focus on one of the relevant characteristics of the TARGET approach. They thus illustrate these characteristics by referring to experiences gained when implementing the approach. This section demonstrates that despite the fact that the participating organisations come from what have been termed as 'inactive' countries at national level policy in gender equality in R&I, TARGET implementers and authors have not only developed cutting edge reflections on policy transfer, sustainability, sexual harassment and the integration of the gender dimension into curricula, they have also implemented these approaches in some cases in unsupportive policy contexts.

Dia Anagnostou discusses aspects of the transferability of gender mainstreaming and gender equality policies in research organisations from the north to the south of Europe and asks: 'How well does it travel?' She argues that developed status quo of gender equality policies focusing on three dimensions (fixing the numbers, fixing the institution and fixing the knowledge) has been developed in Northern and Western European countries but has only partly been accepted and adopted in Central-Eastern and South-Eastern Europe. This is due to a lack of a policy discourse that leads to divergent understandings of gender equality in R&I as well as low acceptance of gender equality at political and societal levels. She calls for an intensified gender equality discourse involving the EC, the EU Member States and Associated Countries as well as civil society actors and pioneering institutions.

Anastasia Zabaniotou, Aigli Tsirogianni, Monica Cardarilli and Massimo Guarascio describe the development and outcomes of a network-based CoP linking gender equality to sustainability in Mediterranean countries. A network of engineering schools in the Mediterranean basin (RMEI) developed a CoP involving 12 schools from Southern Europe, North Africa and the Middle East. The CoP aimed at establishing a shared understanding of gender equality policy as a continuous and reflexive process towards cultural change as well as equipping its members with the necessary competence to become change agents in their schools. This required dealing with diverging national frameworks as well as societal and cultural backgrounds. A specific characteristic of the RMEI CoP is the involvement of students, which leads to a multinational, multicultural and intergenerational CoP. The reflection on the experiences of this CoP enabled the identification of key success factors and preconditions for a network-based CoP.

Milica Mirazić and Daša Duhaček focus on sexual harassment in the context of gender equality and describe the development of a specific policy at the University of Belgrade. They explain the relevance of the topic in the gender equality context and outline hindering and supporting factors for the development of a sexual harassment protocol in a decentralised university. While individual faculties developed rulebooks for sexual harassment, the University of Belgrade only recently formulated a comprehensive university-wide policy. This process was supported and facilitated by the GEP and the recently established gender equality structures.

Alina Tăriceanu focuses on the relevance of gender studies for gender equality in Romania. She describes the development of gender studies over the last decades as an uneven and sometimes precarious process. Since the notion of gender has not been properly integrated into research, women's or gender studies are seen as an appendix to mainstream research in the humanities and social sciences. Against this backdrop, Tăriceanu discusses the role of ARACIS – the national accreditation agency for higher education in Romania – and the potential of its GEP to support gender curricula in Romanian higher education.

Olivier Boiron, Carole Deumie, Lena Raviol and Margalith Benech-Kopelianskis highlight their experience of incorporating the gender perspective into the engineering curricula in the École Centrale de Marseille (ECM). Engineering in tertiary education in France suffers from particularly strong gender imbalances. This chapter describes the approach and pedagogical tools developed and implemented at ECM to challenge traditional gender stereotypes, the representation of the engineering profession and predominantly masculine professional ambit as well as to raise awareness of the glass ceiling effect and the prevention of sexual harassment. The ECM approach is multidisciplinary and aims to give students a solid professional grounding as well to provide effective tools for societal transformation.

The third section – 'Experiences with implementation of the TARGET approach in RPOs and RFOs' – comprises two chapters, which reflect on the process and lessons learned in large and small organisations.

Maria Caprile, Mina Bettachy, Daša Duhaček, Milica Mirazić, Rachel Palmén and Angelina Kussy write about the experiences of developing and implementing

GEPs at two universities within the framework of the TARGET project. They reflect on both top-down and bottom-up approaches to GEP development for institutional change, paying particular attention to the characteristics of the implementing organisations, that is, large, complex and highly hierarchical organisations. Both universities operate in difficult national contexts: their host countries – Morocco and Serbia – lack a specific focus on gender equality in higher education and research policy. GEP implementation in both instances has meant engaging different institutional actors as well as fostering reflexive, evidence-based policymaking. The analysis given in this chapter is based on reflections on GEP implementation that combine the perspectives of the implementing organisation and the supporting partner.

Barbara De Micheli and Giovanna Vingelli reflect on experiences with the implementation of the TARGET approach in small organisations – two RFOs and one RPO. These organisations have the potential to influence research policies and institutional activities due to their core roles as RFOs or think tanks. Central elements of GEP development and implementation in all three organisations were internal processes, data collection, competence building and networking. All three organisations based their strategy for institutional change on a consensus within their internal and external CoP. An important aspect when building this consensus was to link gender equality with other institutional priorities and existing processes. The experiences of these three organisations also illustrate the role of targeted dissemination activities that contribute to a national or regional gender equality discourse in R&I.

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Chapter 1

A Reflexive Approach to Structural Change

Angela Wroblewski and Rachel Palmén

Abstract

Gender equality plans (GEPs) are currently the preferred approach to initiate structural change towards gender equality in research organisations. In order to achieve structural change, GEPs have to be more than just a formally adopted institutional policy. Effective GEPs lead to a transformation of gendered practices and thus to structural change. This chapter presents the innovative approach developed for an H2020 structural change project and its theoretical background. We argue that due to the dual logic, which characterises academic organisations, the organisational logic and the academic logic, change is a complex endeavour. To deal with this complexity, one of the main functions of a GEP is to provide space and initiate reflexivity at an individual as well as at an institutional level. A theory of change approach supports reflexivity in all stages of a GEP as it ensures that basic assumptions of the institutional change process are questioned and reflected on by the different stakeholder groups involved in the implementation.

Keywords: Gender equality in research and innovation; institutional transformation; gender equality plan; structural change; reflexivity; resistance; theory of change

Overcoming the Challenge of Structural Change in Research Organisations: A Reflexive Approach to Gender Equality, 15–32

doi:10.1108/978-1-80262-119-820221002

Introduction

Academia is characterised by persistent gender inequalities like the underrepresentation of women in top positions (management or full professoriate). In several European countries, academia is divided into male-dominated and female-dominated subjects. Furthermore, the gender dimension in research and innovation (R&I) is often neglected, which leads to gender-biased results or products. To tackle these inequalities, European (Council of the European Union, 2015; European Research Area and Innovation Council (ERAC), 2015) as well as national gender equality policies address a multidimensional gender equality objective that aims at (1) equal participation of women and men in all fields and hierarchical levels, (2) abolishing barriers for women's careers and (3) integrating the gender dimension into research and teaching. To achieve these objectives, research-performing organisations (RPOs) need to commit themselves to an institutional change process that aims at adapting gendered practices and structures (European Commission (EC), 2012).

In Europe, the use of gender equality plans (GEPs) is currently the preferred method to promote gender equality through structural change (EC, 2012). Over 200 organisations have been supported in developing GEPs through 30 structural change projects funded in the 7th Framework Programme and Horizon 2020. In the upcoming Horizon Europe programme, GEPs will become an eligibility criterion for applicants.

Numerous institutions throughout Europe have therefore developed and implemented GEPs in order to initiate structural change. However, gender inequalities still persist. Research explains this paradox in several ways: commitment to gender equality remains merely rhetoric, support by top management is lacking (EC, 2012), problems with the implementation process (Bergqvist, Bjarnegård, & Zetterberg, 2013; Palmén & Kalpazidou Schmidt, 2019;) or a lack of gender competence (Wroblewski, 2016). These reasons for the ineffective implementation of gender equality policies share an underlying common aspect. RPOs are embedded in two conflicting institutional logics – the academic and the organisational logic. Successful GEPs have to address both these logics.

The aim of a GEP is to initiate institutional transformation through change in gendered organisational practices. The approach developed in the context of the TARGET project is based on feminist institutionalism (Kenny, 2014; Krook & Mackay, 2011; Mackay, Kenny, & Chappell, 2010) as well as on practice theory (Schatzki, 1996, 2003) as a conceptual framework. This chapter describes the approach that supports research organisations in developing and implementing a targeted and reflexive GEP. In the following, we describe the theoretical back ground to the approach, which defines reflexivity as a precondition to change gendered practices. We argue that due in part to the dual logic which characterises academic organisations, change is a complex endeavour. Based on this argument, we outline our concept of reflexivity, which links it at the individual and institutional levels. We argue that one of the main functions of a GEP is to provide space for and to initiate reflexivity at individual as well as at institutional level. A theory of change approach supports reflexivity in all stages of GEP development and

implementation and can provide a space to facilitate an organisational reflexive process for GEP implementation. In the concluding section, we discuss how taking a community of practice (CoP) approach can (a) provide an arena where the dual academic and organisational logics (and subsequent practices) can be mediated, (b) enable a space where gender competence and gender expertise can be combined and reconfigured and (c) provide a potential arena where resistance to gender equality interventions can be successfully tackled (Verloo, 2018).

Universities as Gendered Organisations Involving Dual Logics

Universities can be described as highly gendered organisations (Acker, 1990). Structural barriers for women are a consequence of practices that developed at a time when women were explicitly excluded from universities. These practices are oriented towards scientific merit and define success on the basis of a typical male career. Accordingly, their point of reference is an excellent scientist who is free of any obligations outside university and able to devote his/her entire life to science (see also Max Weber's essay on science as a profession; Weber, 1919). This ideal not only dominates the perception of excellence and related selection criteria but also defines the practices and procedures that constitute this profession. These practices rest on the assumption that good science is gender neutral, although women are clearly less likely to be able to fulfil the requirements. It was not until a significant number of women entered this male-dominated domain that practices which had previously been taken for granted were exposed as gendered in their effects (e.g. European Commission (EC), 2004; van den Brink, 2010).

Gender equality polices in universities tackle such gendered practices by formulating regulations that increase transparency in procedures and reduce the relevance of informal networks on selection decisions. These attempts follow an organisational logic but do not focus on the academic logic of universities.

Institutional logics are socially constructed sets of material practices, assumptions, values and beliefs that shape cognition and behaviour (Besharaov & Smith, 2014). Each distinct institutional logic provides a coherent set of organising principles that define the 'rules of the game'. Universities are prototypical examples of hybrid organisations (Jongbloed, 2015), which are based on multiple institutional logics. As a consequence, they are confronted with a multitude of logics and face the challenges of balancing different missions and dealing with seemingly incompatible demands – a phenomenon that leads to a hybridisation of universities. Jongbloed (2015) argues that in the context of neoliberal reforms the economic logic gains significance when universities become entrepreneurial universities.

Bettina Heintz (2018) identifies two distinct logics that characterise a university in her discussion of the implementation of gender equality policies: the university as an organisation and the university as part of the scientific field. Both functional systems of a university are based on specific logics in which gender

plays a different role. While the relevance of gender is denied in the scientific field, it might be accepted in the organisational logic (e.g. when positive action measures are taken to promote qualified women). These two different logics also entail different power structures. While decision-making powers regarding strategy and resources are exercised by top management in a research organisation (e.g. the rectorate in the case of a university), decision-making in academic contexts is assigned to the highest scientific positions (e.g. full professors). These power structures exist in parallel and remain in most cases unconnected. If they are not coordinated and work against each other, a change in gendered practices is unlikely to happen. Referring to the concept of stealth power (O'Connor et al., 2019; Webb, 2008;), we argue that it is necessary to include not only top management in GEP development and implementation but also stakeholders representing the academic logic who are able to resist change.

Research has identified how gender equality initiatives and policies in R&I often fail during the implementation phase (Palmén & Kalpazidou Schmidt, 2019), thereby resulting in an absence of deep-seated change and the failure to effectively challenge gender norms (Powell, Ah-King, & Hussénius, 2018). Resistance in the implementation phase has been identified as one of the main reasons why gender equality initiatives in R&I may fail to create and sustain effective change. We argue that resistance is more pronounced when the academic logic is addressed especially when gender equality is seen as a threat to excellence. But what is resistance? In the context of the implementation of gender mainstreaming in European Union (EU) research policy, Mergaert and Lombardo (2014, p. 3) describe it as follows:

> Resistance generally means the refusal to accept or comply with something….it specifically means opposition to the change that gender mainstreaming promotes (Benschop & Verloo, 2011; Lombardo & Mergaert, 2013). Resistance is thus meant here as a phenomenon aiming to preserve the status quo rather than question a particular dominant social order.

Resistance to change can be intentional and 'explicit' or subtle and 'implicit'. The latter is often difficult to detect as it can be deeply embedded and ingrained within the gendered organisational structures and stem from gender-blind organisational bureaucracies, processes and procedures (Acker, 1990). Resistance can therefore take the form of 'non-action', thereby reinforcing the status quo simply by doing nothing to further gender equality. It may manifest itself in a failure to allocate sufficient resources to enable real change, in other issues being deemed more important and gender equality slipping down the list of priorities, disappearing altogether from the institutional agenda or being trivialised as an unimportant topic (Verge, Ferrer-Fons & González, 2018).

Hence, the coexistence of these two different logics in RPO practices generates the necessity to address them both simultaneously when developing and implementing GEPs and tackling resistance. In concrete terms, it requires involving all relevant stakeholders (including top management and full professors) in the

process (Pellert, 1999). The exact configuration and materialisation of these two logics is also mediated by the myriad of contexts within which the institution is embedded. How these logics are combined in GEP implementation and the exact composition of the stakeholders involved in the process will vary according to the context.

Reflexivity

As far as the concept of gendered organisations (Acker, 1990) is concerned, there is no doubt that academic practices contain a gender bias, especially those related to excellence (Bell Crawford & Mills, 2011). Despite concrete interventions to tackle this bias, sustainable change remains the exception. Gender bias can be a result of a lack of procedural guidelines, for example, when there are no standardised procedures in place or 'old boys networks' play an important role in appointment procedures (Pasero & Priddat, 2003; van den Brink, 2010). However, even in cases where standardised guidelines do exist, gender bias can still occur (Wroblewski, 2015).

Theodore Schatzki's approach enables the deconstruction of complex university practices. Schatzki's (1996, 2003) concept of social practices allows us to take a differentiated perspective on complex practices such as recruitment practices in academia. According to Schatzki (1996, p. 89), practices are defined as a 'nexus of doings and sayings', which are linked in a certain way. With regard to these links, he (2003, pp. 191–192) describes practices as

> […] organized human activities. […] Each is an open-ended set of actions linked by pools of understandings (pertaining to action), a collection of rules (explicit formulations) and a 'teleoaffective structure' (a range of normativized, hierarchically ordered ends, projects, and tasks, to varying degrees allied with normativized emotions).

This requires that actors involved in practices know the regulations to be obeyed, accept them and are committed to following them. Bearing the dual logics of university practices in mind, this requires that members of appointment committees are committed to regulations both as members of the organisation and as representatives of their discipline (academic logic).

We assume that relevant practices have to contain all three of Schatzki's components (understanding, rules and teleoaffective structure) for both logics. GEPs often include guidelines for procedures that are aimed at increasing the share of women in top positions or decision-making bodies. A study focusing on guidelines for appointment procedures at Austrian universities showed that stakeholders involved in such procedures are familiar with and adhere to these regulations (Wroblewski, 2015). For instance, appointments have to be publicly advertised, and appointment committees have to actively search for qualified women in the event that women are underrepresented among applicants. This active search is conducted by sending the advertisement to the mailing lists of relevant women's

associations. However, such an implementation of gender equality regulations can also be interpreted as a 'tick box exercise'. Furthermore, procedural regulations leave the core element of appointment procedures – the assessment of candidates and related criteria – in a black box. Regulations like the one described earlier do not necessarily accommodate the selection of the best-qualified candidate from a disciplinary perspective. It becomes evident that the procedural guidelines refer to the university as an organisation, while the assessment of candidates to find the best-qualified person refers to the academic logic. When procedural guidelines are known and followed, the teleoaffective structure is not necessarily apparent. Even if stakeholders know the guidelines and follow the regulations, this does not mean that they support the underlying goal (gender equality) or will act in a way that ensures the expected outcome is achieved. It is also possible to interpret the guideline as a bureaucratic requirement that has to be followed in the organisational logic of the RPO. And, most importantly, the regulation does not address the academic logic because the criteria that identify the best-qualified candidate are defined by the discipline.

We assume that reflexivity is crucial to addressing the teleoaffective structure in both logics and linking the two different logics. The call for reflexivity is directed at both the individual and the institutional levels. Martin (2003) deals with reflexivity at the individual level and argues that a lack of reflection and reflexivity is a main explanation for the persistence of traditional – and seemingly gender neutral – practices. She defines reflexivity as 'a special kind of awareness. To be reflexive means to meditate or engage in careful consideration; it also means to ruminate, deliberate, cogitate, study, or think carefully about something' (Martin, 2003, p. 356). She argues that changing gendered practices needs reflexivity, intention and awareness. This includes the consideration of likely gendered effects of actions before they are set (Martin, 2006).

Elisabeth Prügl (2016) highlights how a 'reflexive attitude can help foster democratic deliberation in a context of bureaucratic rationality by self-consciously and critically interrogating both organisational processes and epistemic commitments'. In doing so, she calls for a consideration of both logics and for a combination of individual and institutional reflexivity. According to Manfred Moldaschl (2010), institutional reflexivity refers to organisational rules and practices that include incentives for organisational actors to question institutional routines, criticise established procedures, enable new ideas to thrive and thus overcome barriers to progress and innovation. Hallensleben, Wörlen, and Moldaschl (2015, p. 191) define institutional reflexivity as an analytical concept that means evaluating management practices according to the extent

> to which they generally, i.e., depending on opportunity, promote absorptive capacity for knowledge that may contribute to the revision, e.g., innovation of previous perspectives and practices. Organizational bodies of rules or practices that do precisely that can therefore be characterized as reflexive institutions or as institutionalized reflexivity.

Thus, institutional reflexivity defines the innovation capability of an organisation.

> On an institutional level, reflexivity can be observed in procedures and management tools that (might) contribute to the revision of previous rules, models, assumptions and practices, e.g., by analysing the consequences of one's own action, contentious criticism of unquestioned routines, or sensitising decision makers to path-dependent processes. (Hallensleben et al., 2015, p. 192)

Hence, the application of institutional reflexivity tools assumes reflexivity at individual level.

Sabine Kuhlmann and Joerg Bogumil (2018) apply the concept of institutional reflexivity to public sector innovation and organisational learning. They assume that organisational innovation needs reflexivity at the individual level even if it is not explicitly referred to as such.

> Innovation capacity thus refers to the ability and willingness of organizational actors to systematically generate and internalize knowledge aimed at revising or changing existing organizational rules and routines. […] Reflexive institutions sharpen the organizational actors' awareness about their institutional embeddedness, their standard-operating procedures and the consequences of their actions. (Kuhlmann & Bogumil, 2018, p. 545)

Kuhlmann and Bogumil (2018) argue that performance management and benchmarking make administrative actors 'reflect' on their activities, functioning and performance.

In the following, we will illustrate these theoretical considerations using examples of individual and institutional reflexivity in academia.[1] The first example is taken from an interview on the situation of women in appointment procedures for full professorships with a male professor in a STEM field. The professor began the interview by stating that he was not a gender expert. When asked about the challenges women face in appointment procedures, he mentioned gender-specific differences in the teaching experience of candidates. While men and women had the same general level of teaching experience, fewer women had experience with 'big lectures' like introductory or basic courses. He concluded that professors or mentors must tend to assign women to specialised courses to support them and provide them with their own 'niche'. However, he realised that this also put them at a disadvantage in appointment procedures for full professors. After recognising this, he altered the traditional practice in his department and now changes the person assigned to introductory courses each term – switching alternately between male and female assistant professors. He insists on this, even though his assistants would prefer otherwise (for synergy effects). This example demonstrates

[1]The examples are taken from Wroblewski (2015).

reflexivity on gendered practices. Even though he did not class himself as a gender expert, this professor showed a great deal of gender competence as he had recognised a structural difference that affected the future career prospects of men and women, assumed responsibility, developed an alternative practice, implemented the alternative (changing the established practice in the process) and dealt with the resistance from his assistants.

The second example came up in an interview with a female history professor. The central theme in this interview was that there was problem with women's representation in the history discipline. Female representation among students is about 80 percent, and about 50 percent of staff at all levels are women. When asked where relevant gender differences exist in her subject and how they should be dealt with, the professor described the following situation: She had recognised at one stage that the share of male participants in one of her seminars was above average and spent some time figuring out why this situation had occurred. It turned out that the title of the seminar was formulated in a way that inspired more interest among male than female students. Having recognised this, she started to 'play' with different seminar titles to ensure they addressed men and women to an equal extent. Similar to the previous example, this professor had recognised a gender difference and analysed its origins. She felt responsible for tackling this gender difference and developed and implemented an alternative approach. In her case, this alternative did not meet with any resistance.

These examples were found in universities where gender equality objectives are integrated into steering instruments and developments are discussed between the rectorate and faculties based on a related monitoring. For example, in one university, parts of the budget are distributed between faculties depending on the extent to which gender equality objectives have been achieved. The annual reflection on the developments regarding gender equality and discussion of reasons for success and failure lead to a climate where all faculty members know about gender equality objectives and their relevance and are aware that they are expected to contribute to their achievement. This occurred because the discussion of monitoring results and the related reflection took place not only between the rectorate and the deans but also within the faculties.

The earlier examples show that individual and institutional reflexivities are mutually dependent. Tools supporting institutional reflexivity require relevant stakeholders to be gender competent in order to be able to reflect on practices from a gender equality point of view. Based on the concept of competence used in pedagogy and the gender mainstreaming approach, we define gender competence as a minimum requirement for all actors (see also BMBWF (Federal Ministry of Education, Science and Research), 2018). Gender competence requires recognition of the relevance of gender attributes for one's own field of work and responsibility. This recognition is combined with the willingness and ability to deal with these gender attributes in one's own work context – if necessary with the support of gender experts. Gender competence also requires the ability to act on the basis of this reflection and to set actions that tackle these gender attributes and their gendered consequences. Hence, gender competence requires constant reflection on the gender dimension in one's own field of work and is a basic competence

that all stakeholders should have. Consequently, structural change also requires that university teachers, researchers, administrative staff, managers and students are all gender competent.

Theory of Change

A theory of change approach enables individual and institutional reflexivity to be integrated into the GEP process. This has to be tailored to the context and needs of the specific institution and may focus on the development of the GEP itself or on specific interventions or measures within the GEP.

According to Isabel Vogel (2012, p. 3), a theory of change is 'an outcomes-based approach which applies critical thinking to the design, implementation and evaluation of initiatives and programmes intended to support change in their contexts'. When developing a theory of change, an institutional audit may first be carried out to map the relevant context for the initiative (including the social, political and environmental conditions), the current state of the problem that the intervention aims to tackle (e.g. human resources data, staff perceptions, existence of gender equality policies) as well as the relevant institutional actors and stakeholders. Based on this audit, the long-term change that the initiative seeks to foster is defined though the development of visions, objectives and targets. Actions, expected outcomes and impacts are then specified. The theory of change approach requires the elaboration of a process or sequence of change that spells out the path to the desired long-term outcome as well as explicitly formulated assumptions about how this change might be brought about. This includes a check of whether the planned activities and the resources provided are appropriate and sufficient to initiate the expected change in the given context. Usually, the results of this process are summarised in a narrative account and a graphical representation.

There are two main elements to a theory of change. First, it can be seen as a tool or methodology that explicitly maps out the logical sequence of an initiative from its activities to the change to which it contributes (Vogel, 2012, p. 9). Second, it encompasses a deeper reflexive process where assumptions of change linked to the programme are made explicit. Mayne and Johnson (2015, p. 419f) state that theories of change

> set out the framework for telling a credible performance story of an intervention. As such, a verified or partially verified theory of change can be used as the basis for reporting on what contribution the intervention has made.

The process of developing the theory of change therefore includes various stakeholders (e.g., programme managers need to be asked to validate, or at least confirm, that developed configurations accurately explain impact, while practitioners must be consulted on assumptions linked to the implementation process).

Articulating assumptions constitutes the main part of the development of a theory of change. Assumptions are those premises upon which programme

interventions are implicitly based yet have not been proven by evidence. Using evidence to identify, check and challenge these key assumptions and map the implicit and explicit linkages of the intervention (input/resource, throughput, output, outcome/result, impact and context) also forms part of the development process (Vogel, 2012, p. 40). This approach depicts the specific components and context of each programme or initiative and its interaction with contextual variables. Funnell and Rogers (2011) stress that each programme is unique and that its development process needs to respond to the local and contextual conditions. As a consequence, each theory of change is also unique. Vogel (2012) emphasises that the quality of a theory of change process rests on 'making assumptions explicit' and making strategic thinking realistic and transparent. In this process, critical thinking is crosschecked with evidence from research (qualitative and quantitative) and wider learning that brings other analytical perspectives drawn from the contextual knowledge of stakeholders, partners and beneficiaries into play.

The theory of change – and sometimes the simplified version of the logic model[2] (W.K. Kellogg Foundation, 2004) – may also represent the starting point for the evaluation strategy (Brisolara, Seigart, & SenGupta, 2014; Funnel & Rogers, 2011; Rogers, 2008; Rogers, Petrosino, Huebner, & Hasci, 2000). This is in keeping with a growing line of research that values the contributions, the theory of change can make to evaluating interventions (Vogel, 2012). Developing a theory of change is an iterative process that requires time to revisit, validate and refine initial configurations.

The TARGET Approach to GEP Development and Implementation

The approach to GEP development used in the TARGET project refers to the concepts discussed earlier: dual logics of academic organisations, reflexivity and theory of change. The TARGET GEP development and implementation process follows a complete policy cycle (May & Wildavsky, 1978). It starts with an empirical analysis of the status quo regarding gender equality and the institutional context (audit). Based on the results of this audit, gender equality priorities and objectives are formulated. Concrete measures to pursue these objectives are then developed, implemented and monitored. Ideally, the process is completed by an external evaluation of the GEP. Based on the monitoring and an evaluation, the GEP or individual measures are adapted as required.

Given the dual logic explained earlier, the GEP process is based on the competences and expertise needed for structural change as well as the different types of stakeholders and the knowledge they bring to the institutional change process. Gender experts (academics and scholars) may have academic knowledge about gender biases but lack more practical knowledge about how this is embedded in

[2]A logic model is a graphic depiction that sets out the relationships and assumptions between the resources and activities of a policy or programme and the changes it expects to deliver (outputs, outcomes).

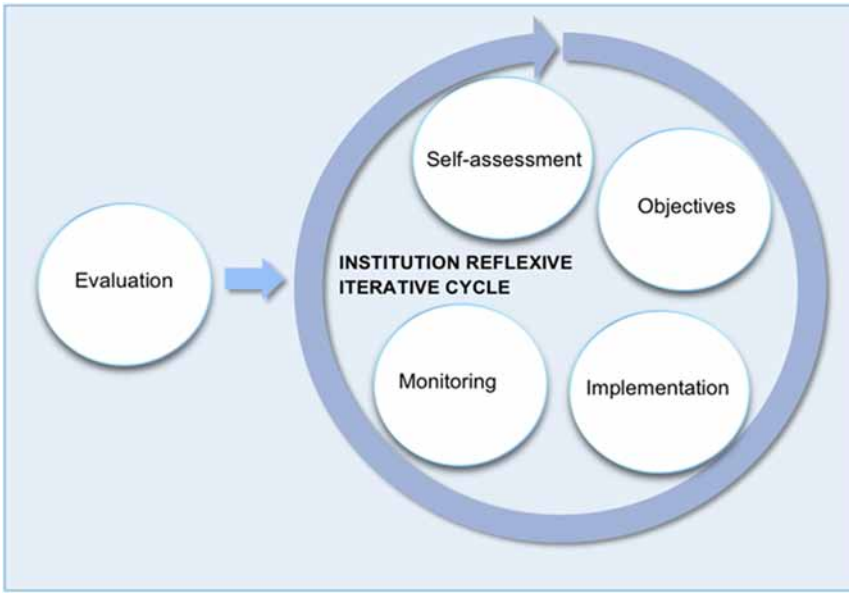

Fig. 1.1. Cycle of GEP Development and Implementation.
Source: Author's representation

organisational processes and procedures (such as recruitment processes). Institutional stakeholders may have gender competence in their specific fields but do not necessarily have gender expertise, which calls for a collaboration with gender experts – for example, an information systems manager may have extensive knowledge of developing a sex-disaggregated information system but no knowledge of how to expand this information beyond binary gender notions. Therefore, he needs input from gender experts to develop non-binary categories. The different types of stakeholders and the different knowledge they intuitively bring to the table may operate on different levels and be difficult to reconcile: 'practitioners frequently feel that academically based approaches might not be realistic or practical, whereas academics tend to think that many practitioners are in danger of becoming technocratic and banal' (Bustelo, Ferguson, & Forest, 2016, p. 13). How these institutional change processes harness, reconfigure and remix these different types of expertise and competences is key to their success. Therefore, a central element in the TARGET approach is the establishment of a CoP, which provides a forum to build up gender competence and supports both individual and institutional reflexivity.

The notion of the CoP was coined by Wenger (1998) and is composed of three main elements: domain, community and practice. The domain refers to a 'shared domain of interest' and implies commitment to this domain as well as a shared competence or 'knowledge area' (in our case, the implementation of a GEP). The CoP is made up of those people who come together to pursue their interest in the domain, interact with each other through activities, discussions and meetings and engage in mutual learning. In our case, the CoP is the group of people who

come together to act as change agents (Callerstig, 2014; Meyerson & Tompkins, 2007) and support GEP development and implementation. The practice involves creating a shared repertoire of resources (such as stories, cases and tools) that helps practitioners to improve their practice (Wenger-Trayner & Wenger-Trayner, 2015). Bustelo et al. (2016) suggest that CoPs are especially suited to the case of gender knowledge and emphasise the synergies between this approach and the life-long learning process that draws on individual reflexivity – and upon which solid gender knowledge relies. The TARGET approach also aims at strengthening institutional reflexivity by linking the different stages of GEP development to discussions in the CoP. Empirical evidence like audit or monitoring results provide the basis for institutional reflexivity.

In the TARGET project, for example, the CoPs discussed the initial GEPs, which represented a first attempt to articulate the desired change(s). The initial GEPs stated the objectives, actions, targets and timeframe. The inclusion of the 'targets' meant that the GEPs articulated a first vision for the 'change' project, what the institution wanted to achieve. Since approval of the GEP required a discussion with relevant stakeholders (including top and middle management), this process also led to an agreement and common understanding of gender equality goals and interventions within the institution. This could be interpreted as a contribution to an internal gender equality discourse that supports reflexivity at both the individual and institutional levels. The subsequent monitoring stage continued to build on the theory of change approach. The indicators defined for the monitoring of GEP implementation focused on the expected outcome (e.g. share of women among newly appointed professors) and on the input level (e.g. number of participants in gender bias training activities or share of female applicants).

The types of CoPs established throughout the different implementing institutions in the TARGET project varied greatly. The majority developed a CoP that included different functional responsibilities and hierarchical levels yet was limited by institutional boundaries. However, some established a CoP that went beyond their institutional realm and included a wider range of stakeholders, including external collaborators. One implementing body, which is itself already a network of various institutions, introduced a CoP that specifically brought together people in its member institutions who were interested in gender equality issues (see also Palmén & Caprile as well as Zabaniotou et al. in this volume).

The TARGET project assumed that using a CoP approach would support GEP development and implementation within an institution for a whole range of reasons. It helps, for instance, to ensure that structural change does not depend on one person (e.g. a gender equality officer) and that the GEP becomes embedded in organisational processes and procedures, thereby making the whole process more sustainable. Discussions within the CoP also contribute to an institutional gender equality discourse by supporting a common understanding of gender equality issues and formulating common gender equality objectives. Beyond the formal adoption of a GEP, achieving actual change requires increased willingness and capacity on the part of the organisation to systematically identify, reflect on and address common gender problems. Hence, CoPs are also a vehicle for increasing

gender competence, that is, a recognition of gender attributes for one's own field of work and responsibility as well the ability to deal 'competently' with these gender attributes within one's own work context. While experience shows that GEP implementation with sustainable outcomes is generally difficult to achieve, adopting a CoP approach to implementing structural change can improve the effectiveness and sustainability of GEPs by embedding gender competences throughout institutional practices.

In the following section, we will examine our assumptions on how CoPs can create a space in which different logics, demands and practices can be mediated. More specifically, we will look at how CoPs can bring together gender competence development and gender expertise as well as how a CoP approach can be an effective strategy to pre-empt, or at least tackle, resistance. Since power relations play an intrinsic role in each of these processes, we will also reflect briefly on how power relations run through each of these themes.

CoPs can provide a space in which the different demands and practices related to the distinct organisational and academic logics can be mediated. In an ideal scenario, CoPs in the pursuit of implementing a GEP engage different functional roles in the institution (gender equality practitioners, researchers, academics, administrators, human resource managers, information system designers). They therefore transcend institutional hierarchies and functional boundaries, providing an arena where diverse actors and agendas with shared visions and aims can come together on a continued basis. In this way, CoPs provide an attractive approach for GEP implementation, which takes the complex reality of academic organisations into account and creates a forum in which the tensions generated by dual organisational and academic logics and the subsequent processes and procedures can be mediated. For example, a CoP might work on a less-gendered bias recruitment process by bringing together deans – who represent the academic logic yet can have hiring power – with members of the human resources department – who represent the organisational logic – to redefine recruitment processes (e.g. by training search committees, defining the wording for job adverts and pushing for transparent hiring and selection processes). This example is, however, based on a CoP approach of engaged stakeholders committed to change. Of course, a CoP approach that stresses peer-to-peer learning on an equal basis regardless of institutional hierarchical power relations (and how these are embedded into practice) may idealise the willingness of the dean to surrender his/her 'academic freedom' to choose the 'excellent' candidate while enthusiastically engaging in cumbersome processes for gender proofing recruitment. Nevertheless, it is important to stress how CoPs can provide a shared space in which different stakeholders come together to learn about each other's practices and reflect on and improve their own practice.

CoPs for GEP implementation also provide a forum to bring together gender competence and gender expertise. Literature has shown that *how* gender expertise is incorporated into gender equality interventions has a crucial effect on their outcomes – with better outcomes for those with more centrally placed gender experts (Palmén & Kalpazidou Schmidt, 2019). It is not only the 'place' of gender expertise in interventions that matters – how different knowledge and practices

are combined, reconfigured and re-mixed can be crucial for achieving structural change. Furthermore, a CoP can provide a forum where stakeholders with gender competence (in their particular area of work) come together with gender experts to improve their practice and have a greater impact in challenging gender-biased processes and procedures.

Taking a CoP approach to gender equality and structural change in R&I can also be an effective strategy to tackle resistance – primarily through its emphasis on community engagement and participation. There is a general recognition in the literature that change is more effective if those it affects have been involved and engaged in processes and negotiations that result in the new understandings, practices, procedures and relations the change process seeks to embed. Participation, engagement and consensual decision-making are therefore often portrayed as effective strategies that are able to minimise resistance. This has been criticised by some as a strategy of 'co-option' – where key decisions have been taken elsewhere, and participatory processes are developed to bring dissenters on board and thwart resistance (Rahman, 1995). A CoP approach is, however, congruent with a co-creation approach to meaning which can provide a solid basis and shared understanding, two elements that are much needed in a change process (Karner, Thaler, & Wicher, 2017). Resistance can, in some instances, mean that the change process needs to be better articulated, defended and justified. In some cases, this can in fact lead to a better quality and more solid change process (Thomas & Hardy, 2011), and CoPs can provide the forum for this discussion.

Conclusions

Structural change in research organisations is a challenging endeavour for several reasons. GEPs aiming at structural change have to address the dual logics to which research organisations are exposed (as institutions following an organisational logic and part of academia following an academic logic). As the mechanisms that yield to gender imbalances are complex and not easy to detect, structural change is the result of a process that starts with the identification of the problem and leads to the development of targeted policies. However, such a process is doomed to failure if it is not supported throughout the organisation. It is very unlikely that an isolated expert will successfully pursue such a process. Hence, sustainable structural change also requires raising awareness and building up gender competences within the organisation as well as bringing together relevant stakeholders who are interested in gender equality issues or who are responsible for processes which are key to gender equality (e.g. recruitment of staff).

To address this complexity adequately, the TARGET project proposed an evidence-based and reflexive process for GEP development and implementation, which is targeted to the needs of the organisation and embedded in a CoP. The following chapters discuss two key elements of the TARGET approach – namely the role of empirical evidence for a reflexive gender equality policy and the significance of a CoP for the development of an institutional gender equality – in more detail and demonstrate their relevance for building up gender competence as well as for reflexivity.

Acknowledgment

The authors would like to thank Pat O'Connor for her insightful and constructive comments on a draft version of this chapter.

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Chapter 2

Relevance of Monitoring for a Reflexive Gender Equality Policy

Angela Wroblewski and Andrea Leitner

Abstract

The TARGET approach aims at establishing a reflexive gender equality policy in research performing and research funding organisations. Monitoring has enormous potential to support reflexivity at both the institutional and the individual levels in the gender equality plan (GEP) development and implementation context. To exploit this potential, the monitoring system has to consist of meaningful indicators, which adequately represent the complex construct of gender equality and refer to the concrete objectives and policies of the GEP. To achieve this, we propose an approach to indicator development that refers to a theory of change for the GEP and its policies. Indicator development thus becomes a reflexive endeavour and monitoring a living tool. This requires constant reflection on data gaps, validity of indicators and the further development of indicators. Furthermore, we recommend the creation of space for reflexivity to discuss monitoring results with the community of practice.

Keywords: Gender monitoring; gender indicators; gender equality policy; policy steering; reflexivity; gender equality plan

Overcoming the Challenge of Structural Change in Research Organisations: A Reflexive Approach to Gender Equality, 33–52

doi:10.1108/978-1-80262-119-820221003

Introduction

The TARGET approach to gender equality plan (GEP) development and implementation is based on the complete policy cycle model developed by May and Wildavsky (1978), which emphasises the role of empirical evidence for policy development in general. The starting point for the development of gender equality policies is the gender analysis, which identifies the main gender equality problems. The results of this analysis are used to define the gender equality priorities and goals, which then form the basis for the development and implementation of concrete measures. Both the implementation of these measures and the development of the context should be closely monitored, while the measures themselves should be evaluated by an external body after a given period of time and/or during the implementation phase. This approach is in line with the expectations formulated by the European Commission (EC) in the context of the GEP requirement in Horizon Europe (EC, 2020, 2021).[1]

The steps in the process outlined above hold enormous potential for reflexivity. For instance, the gender analysis is far more than the analysis of gender-segregated data such as the assessment of the representation of women and men in different areas or hierarchy levels and their access to resources. In addition, it should contain a discussion of the underlying gender concept (How is gender defined?), the gender equality objectives (What should be achieved?) as well as assumptions on reasons for gender inequalities (What are the underlying mechanisms?) within the organisation. The latter might be gender stereotypes, which influence criteria used in decision-making or the presentation of the organisation to the public (e.g. webpage, folders). Indicators for the gender analysis and monitoring can support this reflexive process if they go beyond simple sex counting. Careful checks should be made to ascertain if the data or indicators used contain some kind of gender bias or if they strengthen – unintendedly – gender stereotypes. Gender indicators should be based on an explicit gender concept, refer to at least one gender equality objective and provide a measurement that allows an analysis of the development of gender equality in the organisation.

[1]The EC formulated a GEP requirement in Horizon Europe. Participants, i.e. public bodies, research organisations or higher education institutions established in a Member State or Associated Country, must have a GEP in place that fulfils mandatory process-related requirements. In concrete terms, the EC requires that (1) the GEP is a public document, formally signed by top management, (2) dedicated resources are provided for gender equality (e.g. funding of a gender equality position), (3) the GEP is based on empirical evidence and monitoring, and (4) training and capacity building are foreseen within the institution (e.g. regarding gender bias). The Commission also formulated five recommended areas to be addressed in the GEP: work-life balance and organisational culture, gender balance in leadership and decision-making, gender equality in recruitment and career progression, integration of the gender dimension into research and teaching content, measures against gender-based violence including sexual harassment.

If gender equality priorities, targets and measures are formulated on such a basis, they will doubtlessly focus not only on increasing female representation but also on eliminating gender bias from structures and processes within the organisation. Monitoring the implementation of such priorities, targets and measures also opens up opportunities for reflection by empirically analysing both the progress towards gender equality and any persistent gender differences (or even backlash), thereby providing food for thought for further discussion. Involving stakeholders in all steps paves the way for an evidence-based gender equality discussion in an organisation, thereby raising awareness and encouraging a deep reflection on both the individual and institutional levels. The results of both the gender analysis and the monitoring should therefore be used to clearly communicate the need for action and the priorities identified.

This chapter discusses the principles of monitoring and gender indicators and presents ways of developing a monitoring system for a tailor-made GEP. These will be illustrated using concrete examples taken from monitoring systems developed in the TARGET project.

Purpose and Principles of Monitoring

The main purpose of monitoring is to provide empirical evidence for the assessment of policy implementation and the reflection on current developments regarding gender equality (International Labour Organization, 2020; Wroblewski, Kelle, & Reith, 2017). Usually, the monitoring builds on the empirical analysis of the status quo (gender analysis or audit) and its data sources and indicators. It is, however, more than a regular update of the gender analysis. The monitoring itself will represent a further development due to the implementation of concrete policies and possible changes in the context. Therefore, gender monitoring should be interpreted as a living tool and as such be subjected to constant reflection regarding the reliability and validity of its indicators. A measure is reliable to the extent that it produces the same results repeatedly. While no data collection is totally reliable, the aim is always to reduce measurement error as far as possible. A measure is valid to the extent that it measures what it is intended to measure. The latter is of specific relevance in the gender context, an aspect that will be illustrated in the following.

Markiewicz and Patrick (2016, p. 12) define monitoring as:

> the planned, continuous and systematic collection and analysis of program information able to provide management and key stakeholders with an indication of the extent of progress in implementation, and in relation to program performance against stated objectives and expectations.

According to Rossi, Freeman and Lipsey (1999, p. 192), monitoring generally involves 'program performance in the domain of service utilization, program organization and/or outcomes'. In concrete terms, a continuous monitoring of

policy implementation generally pursues four goals, which together support the efficient use of resources:

- Monitoring should provide an overview of current developments in the context of the policy of interest (e.g. number and gender composition of employees or students, number and gender composition of decision-making bodies). Changes in relevant context indicators might influence policy implementation and should therefore be analysed on a regular basis.
- The core function of the monitoring is to provide information about policy implementation (e.g. number of policies implemented, number of participants in training programmes and share of women, number of beneficiaries of subsidies and share of women, budget spent on specific measures).
- The monitoring aims at identifying deviations between planned and actual policy implementation, which may indicate ineffective policy implementation or unrealistic policy assumptions. If such problems are detected at an early stage, they can be counteracted by adapting the policy or its implementation.
- In an ideal scenario, the indicators used in a monitoring system also provide the basis for policy steering. For example, when performance agreements between a university and the government or within a university (e.g. between the rectorate and the faculties) contain gender equality objectives, which are related to indicators, these indicators should be formulated in a way that corresponds to specific gender equality objectives.

In general, the monitoring mainly addresses two groups, who should act on its results. The first is management, which takes monitoring data into account when deciding on the continuation, termination or adaptation of policies. The second are the people implementing the policies, who should use the monitoring results to reflect on and optimise implementation as required.

To serve its purpose, a monitoring should be tailored to the concrete context of an organisation and its gender equality policies. The aim is not to provide lots of data (data cemetery) but data that are analysed on a regular basis. Accordingly, efficient monitoring should be based on the following principles (see also Wroblewski et al., 2017):

- Monitoring systems are based on data that are available on a regular basis and easily accessible. In most cases, monitoring indicators consist of quantitative indicators that are derived from the main objectives in a policy field. However, objectives cannot always be formulated in a quantifiable manner. In such cases, qualitative indicators should be included.
- A monitoring system should include indicators that describe the context of the policy or measure, its implementation as well as the expected output or outcome.
- Indicators focusing on the implementation of policies should be derived from a logic model or programme theory that has been explicitly formulated for the concrete policy.

- Monitoring indicators should be developed with the participation of the main stakeholders. The aim is to establish an agreed set of indicators that all relevant stakeholders accept as meaningful and relevant. This agreed set of indicators should likewise be based on a data source that all stakeholders define as reliable.
- The agreed set of indicators should be analysed at regular intervals (e.g. yearly or monthly). The timing should be linked to the planned intervals for presentation and discussion of monitoring results (e.g. in the form of annual or monthly reports). Regular presentation of monitoring results will both contribute to a gender equality discourse within the organisation and provide the basis for organisational learning.

Even if monitoring provides a basis for the assessment of policy implementation, it still has to be distinguished from evaluation. Monitoring is the systematic documentation of key aspects of policy implementation that indicate whether the policy is functioning as intended or adhering to some appropriate standards. In contrast, evaluation is

> the systematic assessment of the operation and/or the outcomes of a program or policy, compared to a set of explicit or implicit standards, as a means of contributing to the improvement of the program or policy. (Weiss, 1998, p. 4)

Since an evaluation usually takes place after a certain period of policy or programme implementation, it conveys an ex-post perspective. If the evaluation is performed in parallel to implementation, it is referred to as an ongoing evaluation that is characterised by blurred boundaries between monitoring and evaluation. However, while monitoring is carried out internally, evaluation aims at providing an external view on implementation. An evaluation can be commissioned by those implementing the policy or programme or by a superior authority (e.g. a state authority in the case of state-funded policies).

Monitoring and evaluation are complementary approaches. The complementarity can take different forms (Markiewicz & Patrick, 2016, p. 17): The relationship is sequential when monitoring generates questions to be answered in an evaluation or evaluation identifies areas that require future monitoring. It is informational when monitoring and evaluation draw on the same data sources but ask different questions and frame different analyses. It is organisational when monitoring and evaluation draw on the same data sources, often channelled through the same administrative unit. It is methodological when monitoring and evaluation share similar processes and tools for obtaining data. It is hierarchical when performance data are used by various hierarchies, sometimes for monitoring and sometimes for evaluation. Finally, it is integrative when both approaches are designed at one time, unified and draw on a shared monitoring and evaluation framework. Regardless of the concrete relationship, monitoring and evaluation functions are integral to the effective operation of policies and programmes and increase the overall value they create.

Gender Indicators

The monitoring of a GEP ideally contains indicators that allow the assessment of its implementation as well as its outcomes. Hence, the monitoring is composed of gender indicators. Gender indicators do not represent gender equality per se. As gender equality is a complex construct, a gender indicator can only be an approximation. As Beck (1999, p. 7) puts it:

> An indicator is an item of data that summarises a large amount of information in a single figure, in such a way as to give an indication of change over time, and in comparison to a norm.

Hence, indicators differ from statistics: the latter merely present facts while the former involve comparison to a norm and interpretation. A gender indicator is thus an indicator that captures gender-related change over time.

The deviation between the indicator and the construct to be measured has to be reflected on and considered in the interpretation. In this context, the conceptualisation of gender and its equivalent in empirical evidence is of specific relevance. While gender is seen from a theoretical point of view as socially constructed (Butler, 1990; West & Fenstermaker, 1995; West & Zimmermann, 1987), it is usually coded dichotomously in administrative data (female/male). Accordingly, the variable *sex* or *gender* available in empirical data does not provide information about gender (Döring, 2013; Hedman, Perucci, & Sundström, 1996; United Nations Economic Commission for Europe (UNECE) & World Bank Institute, 2010). In addition, sex and gender interact with each other, for example, when the male body was the main reference in human medicine and clinical trials were conducted primarily by men, or when gender research in the 1960s focused mainly on women and was mainly conducted by female researchers (Stefanick & Schiebinger, 2020). Gender refers to norms, behaviours and roles associated with being a woman, man, girl or boy, as well as their relationships with one another. As a social construct, gender can change over time. Furthermore, both sex and gender produce inequalities that intersect with other social and economic inequalities. Hence, when discussing gender-based discrimination, gender intersects with other factors of discrimination such as age, socioeconomic status, disability, ethnicity, gender identity and sexual orientation (van der Haar & Verloo, 2013; Verloo, 2006; Walby, Armstrong, & Strid, 2012). To approach this complex construct in empirical analysis, the variable *sex* is differentiated by other relevant variables – if these are available. The availability of information on other relevant characteristics like disability, care responsibilities or gender identity is the exception rather than the norm. The assumption that specific characteristics like care responsibilities mainly apply to women may lead to an unintended emphasising of gender stereotypes and supports the identification of discrepancies as gender-based even though they are based on other characteristics (Degele, 2008; Stadler & Wroblewski, 2021). This problematic aspect gains additional relevance because available data might be gender biased, especially in the case of administrative data. The production of administrative data tends to overrepresent realities, which are male dominated. This becomes a problem if such data are used for analysing gender

imbalances, for example, when labour market statistics are used to analyse gendered patterns of employment because official statistics only consider paid employment (Criado-Perez, 2019; D'Ignazio & Klein, 2020; Hedman et al., 1996).

Gender indicators are not merely statistics on men and women. They highlight the contributions of men and women to society and (in our context) to science and research as well as their different needs and challenges. To depict this complex picture adequately, a set of indicators that covers all relevant aspects is required. The interpretation of one isolated indicator may be misleading. In the context of gender equality policies, the monitoring has to contain indicators, which address all three main gender equality objectives. In other words, it must contain indicators about women's representation in all fields and at all hierarchical levels, indicators that represent structural barriers for women (such as women's participation in decision-making) and indicators that display the integration of the gender dimension into research content and teaching.

Data availability differs for these three dimensions, which in turn affects the validity of indicators. It is easier, for example, to depict women's representation than it is to show the gender dimension in research content and teaching (see EC, 2018, 2019a, 2019b, 2019c, 2019d). In most cases, the availability of data on objective, gender-balanced representation in all fields and at all hierarchical levels is quite good. Education establishment knows the gender composition of students and staff in different disciplines as well as in decision-making bodies. Information on the share of women at different hierarchical levels is likewise usually available. Data availability is not so common when it comes to structural barriers for women's careers. Information on the representation of women at different stages in appointment procedures, for instance, is not available by default. The availability of data on the integration of the gender dimension into research and teaching content is generally limited.

Different data sources – such as administrative data that is electronically available (e.g. student or staff records) or project/publication repositories (to identify projects and publications with gender content) – are likewise relevant for monitoring. However, it is not always possible to extract gender-relevant information from electronic data management systems (e.g. in the context of recruitment). Hence, the development of indicators for gender analysis or gender monitoring often requires an adaptation of existing data sources, the establishment of new data collection mechanisms and specific data collection (e.g. a survey). Indicators can be either quantitative (e.g. number, percentage, ratio) or qualitative (e.g. assessment in qualitative terms). Regardless of their type, indicators should always be SMART[2] (Doran, 1981). Ideally a combination of qualitative and quantitative approaches will be used to compensate for the shortcomings of both approaches (e.g. Flick, 2018; Mertens, 2017).

[2]SMART indicators are specific (i.e. should be precise and focused, not a combination of multiple things), measurable (i.e. there should be a practical and undisputed means of measuring), achievable (i.e. should not refer to something that is beyond the means of achievement), realistic (i.e. should not be vague and hardly make sense) and time bound (i.e. should not consider the situation over an indefinite period).

The previous comments point to three key aspects of indicator development: First, it is important to use a consistent gender construct. Second, indicators should be derived from gender equality objectives and targets. Third, data collection is not an end in itself but should contribute to the purpose of monitoring. In the following, we will illustrate these aspects in reference to institutional context indicators and indicators addressing policy implementation for the three gender equality objectives.

Institutional Context Indicators

Institutional context indicators allow a description of the status quo of gender equality in the institution and provide the main information about the institution needed to interpret developments and changes properly. For a proper interpretation of these indicators, further information on the context is required (e.g. number of staff and students, number of management positions and decision-making bodies or number of new appointments). Changes in the share of female professors, for instance, should be interpreted with caution when the institution only has a few professorial positions. In such a case, one newly appointed woman or one retiring woman can have a big influence on the share of female professors. Furthermore, the interpretation of a lack of change requires information on the number of appointment procedures in the respective period. In the case of research funding organisations (RFOs), institutional context indicators refer to their core task, namely funding. These can include the number of calls or funded projects, the budgets available for funding or the number and composition of review panels.

Institutional context indicators describing the status quo of gender equality are usually also used to measure outcomes. They should represent all three gender equality dimensions addressed in the GEP. Table 2.1 provides concrete examples for such indicators for research performing organisations (RPOs) and RFOs.

Table 2.1. Examples for Institutional Context Indicators for RPOs and RFOs.

	RPOs	**RFOs**
Gender balance in all disciplines and at all hierarchical levels	Share of women in disciplines (students, staff) and hierarchical positions	Share of women among applicants Share of female principal investigators
Decision-making	Share of women in decision-making bodies	Share of women among evaluators Share of women in RFO decision-making bodies
Gender dimension in research and teaching content	Share of research projects that address the gender dimension Share of teaching courses that consider the gender dimension	Share of research projects that address the gender dimension

Source: own research.

Indicators for Policy Implementation

Examples for indicators that focus on the implementation of policies can include the number of participants in programmes, the budget spent on programme implementation or the number of complaints addressed to an equality officer. A meaningful indicator for the monitoring of policy implementation should be derived from the concrete objective of the GEP or the concrete policy. In the course of policy development, a logic model (W.K. Kellogg Foundation, 2004) or theory of change (Funnell & Rogers, 2011) should be formulated, which explains the underlying assumptions on why the policy is expected to reach its target groups and objectives.

Following this approach, the starting point for indicator development are the objectives, activities and targets formulated in the GEP. The objective is what is to be ultimately achieved, the final form or situation we would like to see. But it also has to be clearly distinguished from a vision. A vision can be idealistic; a goal must be more realistic. An organisation will ideally have a fixed vision that does not change over time. However, it can have different objectives and targets that are periodically adjusted to the vision.

In most cases, and given their different purposes, it makes sense to differentiate between monitoring and evaluation targets. The targets formulated in the GEP relate to a strategic level or in evaluation terms to the impact. Monitoring targets generally refer to the implementation level, that is, the desired outputs of policies or measures (e.g. 100 employees should receive gender competence training in a specific year). They also need to be formulated for time spans that are covered by the monitoring (data collection dates/frequencies, e.g. annual, biannual). Evaluation targets, in contrast, refer to the impact or level of outcome. Indicators for this level cannot be measured in short frequencies (e.g. monthly or even biannually), and it is therefore of no practical use to set such short evaluation intervals. Targets at each level should be set at the same frequency/period as was planned for their measurement. Accordingly, targets at outcome level (for evaluative purposes) should ideally be set at three- or five-year intervals.

The dimensions which monitoring indicators should represent also apply to the outcome or evaluation level. However, achieving the desired outputs does not necessarily result in achievement of the expected outcomes. Although this should logically be the case, assumptions that the measures should work can prove to be wrong, or unexpected circumstances can arise, which might affect outputs or outcomes.

The assumptions as to why interventions should lead to their expected outcome are usually formulated in a theory of change or programme theory.

> A program theory is an explicit theory or model of how an intervention, such as a project, a program, a strategy, an initiative or a policy, contributes to a chain of intermediate results and finally to the intended or observed outcomes. (Funnell & Rogers, 2011, p. xix)

The formulation of a theory of change allows lessons to be learned from failure and success and by referring to monitoring results. Reflections on policy or programme implementation based on monitoring can lead to an adaption of

Table 2.2. Examples for Visions, Objectives and Targets.

Visions	Objective	Evaluation Targets at Impact Level	Monitoring Targets
Structural barriers for women's careers are abolished	To foster equality in recruitment practices	Increase the share of women among newly appointed professors up to the share of women among applicants	Increase the share of women among newly appointed professors to *X*% by *Y* (date)
Women and men are equally represented in decision-making	To foster gender balance in decision-making committees and boards	Increase the share of women in decision-making committees and boards	Increase the share of women in board *X* to *X*% by *Y* (date). Increase the share of gender-balanced committees to *X*% by *Y* (date)
All research projects consider the gender dimension in content in all stages of the research process	To promote the integration of the gender dimension into research and innovation	Increase the share of research projects that consider the gender dimension in their content	Fund *X* (#) research projects that consider the gender dimension in their content per year
		Increase the share of reviewers with gender competence or expertise	*X*% of all reviewers received gender training in year *Y*

Source: own research.

objectives or the implementation framework. The theory of change defines the central processes or drivers by which change is expected to come about for the organisation or the target group. The assumptions on which the theory of change is based could be derived from a formal research-based theory or an unstated, tacit understanding about how things work. A simplified representation of a theory of change is the logic model.

> The program logic model is defined as a picture of how your organization does its work – the theory and assumptions underlying the program. A program logic model links outcomes (both short- and long-term) with program activities/processes and the theoretical assumptions/principles of the program. (W.K. Kellogg Foundation, 2004, p. III)

The logic model is merely a simplified representation of mechanisms that lead to the expected outcome and impact because it does not consider feedback loops

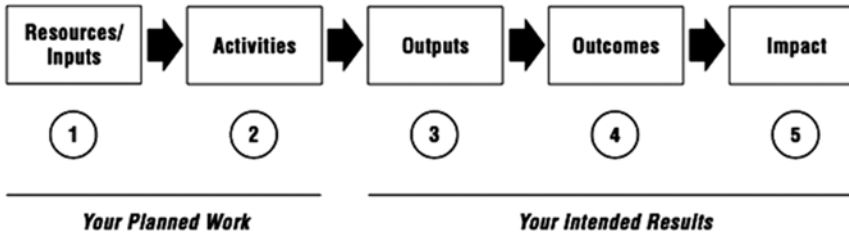

Fig. 2.1. Logic Model (*Source*: W.K. Kellogg Foundation (2004, p. 1).).

or nonlinear relations. However, referring to a theory of change when developing policies and monitoring indicators forces responsible stakeholders to think carefully about the concrete objectives and targets of an intervention and be realistic about the expected outcome given a specific input. Table 2.3 provides example input and output indicators for the three gender equality dimensions.

Referring to a logic model supports the formulation of consistent and coherent policies and reduces the risk of failure due to unrealistic expectations that implementation cannot meet. It also provides criteria for the success and failure of policies (Engeli & Mazur, 2018). To illustrate this, we will now look in more detail at how the logic model can be applied to quotas for decision-making bodies.

Table 2.3. Examples for Implementation Indicators.

Policy/Programme Aim	**Input Indicator**	**Output Indicator**
Abolishment of structural barriers for women's careers	Share of job advertisements that are formulated in gender-sensitive language Share of selection committee members who participated in anti-bias training	Share of women among newly appointed staff in relation to the share of female applicants
Gender balance in decision-making	Number of gender competence training measures for members of decision-making bodies	Share of women in newly established decision-making bodies
Integration of gender dimension into research content and teaching	Share of researchers who participated in awareness-raising or training measures focusing on the gender dimension in research content	Share of research projects that formulate gender-specific research questions (self-assessment)
	Share of teachers who participated in training measures focusing on gender-sensitive didactics	Share of courses with literature focusing on relevant gender issues in in their syllabus

Source: own research.

Example: Logic Model for Quotas for Decision-Making Bodies

Gender equality policies in academia have long been based on the critical mass theory formulated by Kanter (1977), in which it was assumed that cultural change will take place when women's representation in an organisation exceeds a certain benchmark (the so-called critical mass). Experience has shown, however, that this does not automatically take place: women's underrepresentation in top positions in particular remains unchanged. Hence, specific instruments have been introduced to support women on their path to top-level positions. Quotas have proved, for example, to be an efficient instrument in increasing women's representation in decision-making in academia (Lipinsky & Wroblewski, 2021; Voorspoels & Bleijenbergh, 2019). Table 2.4 shows a logic model for a quota regulation for decision-making bodies to increase women's representation in decision-making.

At first sight, quotas look like an intervention with a clearly defined objective: They aim at increasing the representation of the underrepresented sex in a specific group like a decision-making body. However, a second look reveals another, often implicit objective: Quotas should also lead to less gender-biased or more women friendly decisions. This implicit assumption has led to critique of the implementation of quota regulations and their effects (e.g. Guldvik, 2008; Meier, 2008; Sacchet, 2008; Storvik & Teigen, 2010; Törnqvist, 2008; Voorspoels & Bleijenbergh, 2019). Childs and Krook (2008) suggested differentiating between numeric (share of women in decision-making bodies) and substantive (considering women's concerns in decision-making and abolishing a gender bias in decision-making procedures) representations of women. Hence, if a quota regulation pursues both objectives and addresses them both with targeted measures, two logics will need to be formulated to achieve a meaningful monitoring. Table 2.5 shows a logic model for specific anti-bias training for members of decision-making bodies.

Interpretation and Further Development of Monitoring and Indicators

The indicators integrated into the monitoring should be interpreted regularly, for example, on an annual basis. Ideally, the interpretation intervals will be compatible with the policy cycle, for example, the policy implementation period. When interpreting an indicator, it is necessary to define its underlying norm. This normative element allows the identification of failure or success. The share of women in decision-making bodies alone does not provide any information if the concrete value has to be interpreted as positive or negative. It is possible to define several benchmarks and, in most cases, multiple perspectives on indicators are relevant. First, the value can be interpreted over time, so the focus lies on developments since the last measurement. Second, the value of a specific group can be compared with a relevant comparison group (e.g. the situation of female PhD students is compared with that of male PhD students). Third, the interpretation of an indicator refers to an external benchmark like the national average or the corresponding result for an organisation that has been identified as a role model or as having good practice policies.

Table 2.4. Logic Model for Quotas for Decision-making Bodies (Numeric Representation).

	① **Resource/Input**	② **Activity**	③ **Output**	④ **Outcome**	⑤ **Impact**
Intervention	A guideline/policy for the composition of decision-making bodies is formulated	The guideline is approved Staff members are informed	Staff members know and endeavour to comply with the guideline	The composition of decision-making bodies meets the target quota	Women participate in decision-making as a matter of course
Target	A guideline is formulated Information material is available	All staff members are informed about the guideline	The guideline has been implemented	At least *X*% (target quota) of members of a decision-making body are female	Decision-making positions are equally accessible for women and men
Indicator	Yes/No	Description of communication process Number of staff members who have been informed	Number of staff members who know and comply with the guideline	Share of women in decision-making bodies Share of decision-making bodies that meet the quota	Share of women in decision-making bodies vs. share of women among staff members

Source: own research.

Table 2.5. Logic Model for Anti-bias Training for Members of Decision-making Bodies (Substantive Representation).

	① **Resource/Input**	② **Activity**	③ **Output**	④ **Outcome**	⑤ **Impact**
Intervention	Seminar concept, target group, trainers/experts are formulated	Selection process, seminar or workshop held	Completed seminars	Participants carry out decision-making in a more gender-competent manner	Decision-making bodies behave differently
Target	Concept is developed, trainers are available, target group is invited	Seminars/workshops are held. according to schedule	Participants complete training as expected	Participants apply the training content in their everyday work	Decisions are made without an implicit gender bias
Indicator	Yes/No	Number of seminars	Number of participants by gender and other relevant criteria (e.g. target group)	Number of participants who apply the training content in their everyday work	Share of women at different stages of appointment procedures

Source: own research.

An indicator can also have limitations when it comes to the underlying construct it is intended to represent. This is the case, for example, when sex-disaggregated data is used for gender analysis. Recognising these limitations is necessary for understanding the validity of an indicator and should be explained in the analysis. Lack of data often proves to be an issue in this context. If the only data available is sex-disaggregated data that cannot be differentiated by other relevant variables, these limitations have to be considered in the interpretation. This must be done not only for the sake of clarity but also to avoid an interpretation of discrepancies between men and women as gender gaps even if they might be due to other factors (e.g. care responsibilities).

Filling existing data gaps through specific data collection or further development of administrative data sources can be formulated as an objective of a GEP. Indeed, the analysis of the monitoring may raise new questions, and changes in policy design may lead to an adaptation of the monitoring indicators. Hence, the monitoring should be interpreted as a 'living tool'. According to Hedman et al. (1996, p. 11) 'the production of gender statistics is a never ending process. It is a continuous process of integrating developments and improvements of gender statistics' into the monitoring system'.

Creation of Space for Reflexivity

The TARGET project assumes that the implementation of a GEP is a long-term project that requires constant reflection on the development of gender equality, the formulated objectives and targets as well as the proposed measures (Wroblewski & Eckstein, 2018). Like the process itself, objectives, targets and measures may be adapted to reflect changes in context, progress or a more in-depth understanding of the problem at hand. For example, one of the implementing institutions in the TARGET project collected information on female participation in its panel discussions for the first time. The members of its community of practice (CoP) were surprised by the significant underrepresentation of women, which led in turn to a discussion of underlying mechanisms and the formulation of a policy aiming at gender-balanced panels.

The monitoring results provide a starting point for a reflexive process that aims at increasing awareness of gender issues and building up gender competence as well as early counteraction in the event of suboptimal implementation. These two functions of monitoring should be differentiated. To initiate a gender equality discourse within the organisation, a format for discussing the monitoring results internally must be found. This requires the internal publication of monitoring results and a discursive format (e.g. a presentation or workshop) with the CoP. The discussion of monitoring results within the CoP should be seen as part of an organisational learning process (Hallensleben, Wörlen, & Moldaschl, 2015; Moldaschl, 2007) and take place in an atmosphere of openness and trust. For the institutions participating in TARGET, the development and implementation of the GEP is their first attempt to pursue gender equality goals in a structured, consistent and coherent manner. It can therefore be assumed that some of the planned measures will not achieve their objectives or that the underlying assumptions behind measures will prove unrealistic. Failed attempts also provide useful

lessons learned that are of relevance for the evolution of existing measures or development of new ones. It should be clear that – even if objectives are not reached immediately – gender equality goals will remain a priority. Failure should not result in sanctions but should be turned into constructive lessons learned. This is part of the top management commitment.

Hence, the aim is not to challenge single gender equality policies or the GEP as such but to identify success and failure as starting points for their further development. Ideally, this reflection at institutional level is linked to reflexivity at individual level (Martin, 2006; Wroblewski, 2015). The discussion should aim at supporting CoP members in reflecting on their individual contribution to gender equality, detecting gender bias in their field of responsibility and developing unbiased alternative practices. Since not all members of the CoP are gender experts, the discussion within the community can contribute to raising awareness. However, gender experts should be involved in the development of alternative practices.

Spaces for reflexivity have to be specifically prepared and supported, for example, by providing a workshop moderator who is able to facilitate an open and trusting discussion, activate participants and initiate reflexivity. The gender equality discourse emerging from reflexive practices should also be used to obtain commitment for gender equality goals from all members of the organisation. This is another aspect of the top management commitment: requiring gender-competent action from all staff members within their field of responsibility (e.g. teachers in the teaching context, administrators in their administrative tasks, researchers in the context of research projects).

United Nations Economic Commission for Europe (UNECE) and World Bank Institute (2010, p. 127) recommend the use of gender indicators for communication and awareness-raising activities.

> Gender statistics are valuable only if they are used to assist in understanding of gender issues. Communication is needed to encourage their use and illustrate their value to different users.

It is important in communication activities to identify the different target groups of the message and develop specific communication strategies if appropriate. One such target group is the CoP (including management) with the main aim of discussing monitoring results as part of an internal gender equality discourse. In the event that not all information obtained through the monitoring is suitable for distribution, a specific report should be developed to be distributed within the organisation and beyond. This could take the form of an annual publicly available gender report that presents the organisation as gender-sensitive and demonstrates its commitment to gender equality as well as any related progress. A gender report can also contribute to a national or regional gender equality discourse.

Conclusions

Monitoring aims at providing empirical evidence regarding developments in gender equality and GEP implementation that can be used to assess policy implementation, support policy steering and raise awareness about gender issues. As already

discussed, empirical evidence plays a crucial role for effective GEPs because a comprehensive gender analysis provides the basis for the development of GEPs and policies that address gender imbalances and the underlying mechanisms. If this stage is omitted or remains superficial, policies are at risk of becoming actionistic (Wroblewski, 2021) or being based on an inadequately formulated programme theory (Engeli & Mazur, 2018). Policy development that is not based on a sound analysis of the problem in hand risks ineffective policy implementation, wastes resources and will not contribute to change. However, even when policies are based on an empirical gender analysis, a lack of monitoring can also lead to ineffective implementation. Ideally, monitoring will reveal difficulties in correct policy implementation at an early stage (e.g. problems in reaching the target group, budgetary deviations from the plan). Hence, empirical evidence that is discussed in the CoP contributes to effective GEP development and implementation in several ways.

An evidence-based discussion in the CoP on the status quo of gender equality contributes to a shared understanding of the gender equality problem as well as a broad acceptance of the GEP and its objectives. An evidence-based approach is in line with the logic and self-image of an academic institution. Monitoring has the potential to maintain this acceptance of gender issues and the GEP. However, specific actions must be taken to support the acceptance of the monitoring, for example, by explicitly formulating and communicating the role of the monitoring to the CoP or by linking the gender monitoring to existing monitoring systems in the organisation (e.g. quality management or performance measurement). Empirical evidence contributes to creating awareness of gender inequalities and defines topics to be addressed in the context of a GEP. There is a tendency to think that only 'what gets counted counts' (D'Ignazio & Klein, 2020, p. 97) or that our 'world is generated by numbers' (Heintz, 2012) because the description of social phenomena based on statistics defines how we perceive them.

Monitoring increases transparency and thus supports reflection on an inherent gender bias in organisational processes that are generally perceived to be gender neutral and merit based. While a good database can be the starting point for equality policy, it should be just that – a starting point (Ahmed, 2012). Empirical evidence allows us to identify gendered practices and points to a need for action. If such a reflection leads to an adaption of gendered practices, it can be seen as contributing to a professionalisation of processes.

Last but not least, monitoring provides a validated starting point for a gender equality discourse within the organisation and beyond. Those involved in this gender equality discourse gain gender competence and express their commitment to gender equality. Thus, the reflection based on monitoring results should be seen as part of an organisational learning process that strengthens an organisation's innovation potential and prepares it to meet future challenges.

Acknowledgment

The authors would like to thank Anke Lipinsky for her wonderful and constructive comments on a draft version of this chapter.

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Chapter 3

Relevance of a CoP for a Reflexive Gender Equality Policy: A Structural Change Approach

Rachel Palmén and Maria Caprile

Abstract

This chapter discusses the relevance of a community of practice (CoP) for a reflexive gender equality policy and reflects on the different approaches taken within TARGET. It is based on the literature on CoPs and structural change as well as on experiences in transferring this approach to the context of implementing gender equality plans (GEPs) within different types of research organisations. While the notion of the CoP was coined in the 1990s, literature on gender and such communities remained scarce until a recent wealth of research looked at the role played by inter-institutional CoPs in advancing structural change in research organisations. In this chapter, we examine whether and how an institutional CoP approach has been a useful vehicle for gender equality plan development and how the different configurations of internal and external stakeholders within the CoPs have impacted GEP implementation.

Keywords: Community of practice; reflexivity; power; structural change; gender competence; gender equality plan

Overcoming the Challenge of Structural Change in Research Organisations: A Reflexive Approach to Gender Equality, 53–69

doi:10.1108/978-1-80262-119-820221004

Introduction

This chapter discusses the relevance of a community of practice (CoP) for a reflexive gender equality policy and reflects on the different approaches taken within TARGET. CoPs refer to:

> groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis. (Wenger, McDermott, & Snyder, 2002, p. 2)

The concept of the CoP was originally developed by Lave and Wenger (1991), who stated that learning happened in social relationships rather than through simple acquisition of knowledge. Three key dimensions define a CoP: shared interest and commitment on a domain of practice (domain), mutual engagement (community) and development of a shared repertoire of resources (practice) (Wenger-Trayner & Wenger-Trayner, 2015).

Within the TARGET CoPs, the domain is the advancement of gender equality in higher education, research and innovation (R&I), and is defined in accordance with the three European Research Area (ERA) gender equality priorities: removing gender-related institutional barriers to research careers; tackling gender imbalances and gender bias in decision-making; and integrating the gender dimension in education, R&I content. This is promoted within a framework of initiating a long-term process of structural change. The community is made up of members who come together to pursue interest in their domain, interact through activities, discussions and meetings, and engage in mutual learning. In our case, it refers to the group of people representing key institutional and academic stakeholders who come together to support gender equality plan (GEP) development and implementation. The practice involves creating a shared repertoire of resources, including stories, cases and tools, which helps practitioners to improve their practice. We regard practice as gender competence driven by 'experiential knowledge', which enables members of the CoP to identify institutional gendered practices and develop non-gendered alternatives.

This chapter is based on different sources, including our reflections as a supporting partner in the implementation of the CoPs in TARGET, a literature review and a documentary analysis, that is, of the monitoring and evaluation reports that have been produced throughout the project. The role of supporting partner meant participation in institutional workshops as well as provision of support throughout the whole GEP implementation process – from audit to GEP design and the development of monitoring indicators. The literature review looks at CoPs that transverse different fields – from business and management (Lee, Suh, & Hong, 2010; Murillo, 2011) to higher education (McDonald & Cater-Steel, 2017), nursing (Gobbi, 2010) and community development (Mathieu et al., 2013; Mohajan, 2017). This was complemented by a study of literature that specifically examines structural change for gender equality in R&I (Ferguson, 2021; Lombardo, Meier, & Verloo, 2010; Wroblewski, 2018). Useful literature

(grey and peer reviewed journals) in both thematic areas was identified throughout the duration of the project. The TARGET interim evaluation, which assessed the CoPs in each institution, was also consulted along with the latest monitoring reports of GEP implementing institutions available at the time of writing (TARGET, 2020, 2021).

The aim of this chapter is to examine the following questions:

- How and to what extent have the TARGET CoPs been a useful vehicle for GEP development?
- How have the different configurations of internal and external stakeholders within the CoPs impacted GEP implementation?
- What benefits and hindrances has the CoP approach provided in the implementation of GEPs?

Conceptual Framework: CoP and Gender Equality in Research and Innovation and Higher Education

While the notion of the CoP was coined in the 1990s and has been widely applied in different domains, literature dealing with gender and CoPs remains scarce (Palmén & Müller, forthcoming). CoPs form part of a relatively new policy approach promoted by the European Commission to facilitate the uptake and successful implementation of GEPs in research performing (RPO) and research funding (RFO) organisations. Consequently, there is little literature available as yet on how this approach can help foster the effective adoption and implementation of GEPs. One of the first projects to take up this approach was the Gender Time project, which views its consortium members, that is, researchers, gender equality practitioners and senior managers, as a CoP (Barnard, Hassan, Dainty, Álvarez, & Arrizabalaga, 2017). Subsequent funded projects have employed different approaches to CoPs to facilitate structural change for gender equality. The ACT project (#ACTonGender) has established a wide range of different inter-institutional CoPs with different foci – geographical, disciplinary, thematic or by type of organisation (see Palmén & Müller (forthcoming) for an overview of the different CoPs supported throughout the ACT project). In their review of CoP literature, Thomson et al. (2021) in turn identify that inter-institutional CoPs can be conducive to effective GEP implementation by:

1. fostering knowledge sharing and knowledge creation to improve the effectiveness of existing practices within and across organisations (Probst & Borzillo, 2008);
2. driving institutional willingness and capacity to think and work together on gender issues by providing a forum for mutual learning and capacity building (Pyrko, Dörfler, & Eden, 2016);
3. reducing the opportunities for resistance by emphasising community engagement, participation, sharing, consensus and competence development (Cambridge, Kaplan, & Suter, 2005); and

4. providing support, expertise, inspiration, knowledge and tools for the different steps in GEP implementation, for example, through
   a. tools and guidance to assess the status of gender (in)equalities in the institutions (audit);
   b. 'good practices' implemented by other institutions – identification of actions to address gender inequalities (planning);
   c. involvement of actors through participatory approaches (implementation);
   d. access to networks of gender experts (to help develop relevant monitoring indicators); and
   e. engagement of stakeholders (Espinosa, Bustelo, & Velasco, 2016).

These findings relate to inter-institutional CoPs for structural change for gender equality. So the question now is: To what extent are they relevant to institutional CoPs for gender equality in R&I?

In the TARGET project, CoPs were initially conceived as groups operating within each implementing institution to provide a crucial support structure for those tasked with designing, implementing and monitoring GEPs. The rationale behind adopting a CoP approach to initiate a reflexive process of structural change relies on different aspects. The CoP may play a mediating role, bringing together different actors, transcending hierarchies and functional roles and providing a forum for enhancing evidence-based reflection and learning by doing as an iterative process for building gender competence and tackling gendered practices. Structural change means that gender equality is widely discussed and explicitly embraced in organisational processes and practices through mutual engagement. Using a CoP approach to embed a GEP within an institution is a potentially successful strategy to ensure that structural change does not just depend on one 'change agent'. Responsibilities are instead distributed within the institution, and different stakeholders are involved, thus addressing both the academic and the specific organisational logics (Heintz, 2018). Community engagement in the CoP may also help to handle resistance and ensure the GEP is sustainable.

By providing a reflexive, discursive space where key developments in GEP implementation would be shared, discussed, enacted and reflected on, the CoP was conceived in TARGET as a key factor in building institutional commitment and capacity to initiate structural change. Both aspects – institutional commitment and capacity – were deemed especially important in institutions with little experience in gender equality policies and in countries with a lack of corresponding national discourse. The involvement of representatives from both top management and the academic hierarchy was considered important to support the process of negotiating and building consensus on the short- and long-term priorities for action when it comes to gender equality in the organisation. The CoP was also seen as a forum to develop gender competences and the organisational capacity to tackle gendered practices. Literature on the role of change agents or gender equality practitioners engaged in structural change has highlighted how those who take on this role can often feel isolated and alone in their work and experience a need to recruit 'allies' in the organisation (Eriksson-Zetterquist & Renemark, 2016). The CoP approach promoted through the TARGET project

aimed to spread the responsibility for GEP implementation away from one sole agent to a community of agents with distributed responsibilities. The CoP was therefore also conceived as a mechanism to ensure the embedding of the GEP at various levels in the institution.

The main findings of the paper by Thomson et al. (2021) highlight the following three key components of a CoP approach to fostering gender equality in R&I:

- individual agency and activism
- leveraging credibility and legitimacy
- generosity of knowledge sharing and community learning

So to what extent do the CoP experiences of the TARGET project support these findings? If we examine the CoPs that have been developed and supported through the TARGET project for advancing gender equality in R&I and higher education organisations, we see that three main elements related to domain, community and practice have been central:

- domain – negotiating shared meanings
- community – tackling power relations and resistance
- practice – developing gender competences to identify gendered practices and co-producing alternative, non-gendered practices

Wroblewski (2021a) highlights how the meaning of gender equality cannot be taken for granted. There is a great variation in what gender equality in R&I means across Europe and 'establishing a shared understanding of gender equality and common goals at the EC and Member State (MS)/Associated Country (AC) level' – must be a priority in order to progress (Wroblewski, 2021a, p. 5). This is also true for the institutional level. CoPs can provide a useful forum for the negotiation of shared meanings. Early practice-oriented studies examining CoPs highlighted the 'construction of inter-subjective meaning via the social processes of sensemaking, interpretation and negotiation of meaning at the heart of communal interactions' (Contu & Willmott, 2003, p. 221; Lave & Wenger, 1991). The reciprocal cycles of constructing meaning and taking action (Schulte, 2021) highlight the central role of the construction of meaning in CoP development.

Structural change for greater gender equality in R&I invariably places power relations at the heart of any analysis. There is, however, some debate on the extent to which CoP literature is underpinned by a consensus-based approach or can accommodate a more conflictual reading of power relations. Contu and Willmott (2003) argue that Lave and Wenger's interest in power relations is not marginal and point to the centrality and significance of power relations within their conceptualisation of learning processes. In this vein, they contend that concepts of contradiction, ideology, conflict and power are central for Lave and Wenger's approach to situated learning. Yet they also note that 'Lave and Wenger select functionalist or interactionalist illustrations of their thinking, in which consensus and continuity are assumed' (Contu & Willmott, 2003, p. 292). So, employing a CoP approach for structural change proves an interesting context in which to

examine how change can be achieved – particularly through a 'community'-based approach. How the different CoPs in the TARGET project engaged different actors with differing degrees of power and worked together for structural change helps us to understand how these issues can play out on the ground.

The concept of practice is central to the CoP literature. Gherardi (2009), for instance, stresses the primacy of *practice (above community)* and refers to CoPs as 'practices of communities' to make this point. 'To know', it is argued, 'is to be capable of participating with the requisite competence in the complex web of relationships and among people and activities (Gherardi, Nicolini, & Odella, 1998, p. 274). Competence development forms a key part of practice:

> The move from apprentice to expert occurs through participation in the CoP over the course of the project and in the institutional context – for example, by becoming a known gender expert in the institution who can provide information and opinion based on research literature and cross-national networks. For Lave and Wenger (1991) the movement from apprentice to expert through participation offers clear indications of the social situation of learning. (Barnard et al., 2017, p. 10)

For Lave and Wenger (1991), learning is located or 'situated' within everyday practices (e.g. work). However, learning is not situated in practice 'as if it were some independently reifiable process that just happened to be located somewhere' (Lave & Wenger, 1991, p. 35). Instead, it is conceived as 'an integral part of generative social practice in the lived-in world' (*ibid.*). This is congruent with the literature on gender equality in R&I, which highlights the importance of developing gender competences for the successful implementation of gender equality interventions (Palmén & Kalpazidou Schmidt, 2019; Wroblewski, 2021b). So while we can see that taking a CoP approach to structural change seems to make sense, what does this approach really add that is not covered by the usual structural change processes?

TARGET CoPs

The approach taken in the TARGET project foresaw GEP implementation primarily through the setting up of a CoP within each institution. In practice, the types of CoPs established in the different implementing institutions varied greatly. Some of them – mainly the larger institutions (University of Belgrade (UB), Université Hassan II Casablanca (UH2C)) – set up an internal CoP that included different functional responsibilities and hierarchical levels yet was limited by organisational boundaries. The smaller institutions – two RFOs (Fondazione Regionale per la Ricerca Biomedica (FRRB), Research and Innovation Foundation (RIF)), one higher education quality assurance institution (National Agency for Quality Assurance in Higher Education) and one RPO (Hellenic Foundation of European and Foreign Policy) – tended to establish CoPs that branched out

beyond their institutional realm and included relevant external stakeholders from their local R&I ecosystems. The differences in the configuration of the CoPs were not just related to the size of the institutions but also to their main aims in terms of effecting structural change and whether this was conceived primarily as an internal process or linked to change beyond the boundaries of the implementing institution. While the priority of the universities was to initiate structural change within their own institution, the GEPs of the two RFOs and the quality assurance institution aimed to have a multiplier effect, steering change not only in their own institutions but also in affiliated research performing organisations. The involvement of external stakeholders was thus deemed a necessity. This diversity of CoPs with varying levels of incorporation of external stakeholders yet similar aims provides an interesting framework in which to examine how a CoP approach to structural change can promote gender equality in both RPOs and RFOs.

There was another CoP implementing entity in the TARGET project, namely the Network of Mediterranean Engineering Schools (RMEI), which – as a network of higher education engineering schools – already constituted an inter-institutional CoP from the outset. Accordingly, this chapter does not reflect on the RMEI CoP as its make-up is considerably different to that of the others (see Zabaniotou, Tsirogianni, Cardarilli, and Guarascio in this volume for a comprehensive account of this CoP).

Domain: Negotiating Shared Meanings

The domain should be well defined to affirm its purpose and value to members and stakeholders (Barnard et al., 2017). The domain is important as it serves as the basis of the group's shared identity, which has been identified as a critical success factor. A 'lack of identification with the CoP' is one of five reasons for CoP failure (Probst & Borzillo, 2008, p. 339). In the TARGET project, the domain is GEP implementation in line with the three ERA gender equality priorities: removing gender-related institutional barriers to research careers, tackling gender imbalances and biases in decision-making and integrating the gender dimension into research content and curriculum. This means that all implementing institutions were expected to develop a comprehensive and customised GEP that covered all three thematic areas. The CoP approach should enable a reflexive discussion to be carried out – from the audit process through to the presentation of the audit results and deliberations on the objectives and actions and monitoring indicators to be developed as part of the plan.

In this process, the CoPs played an important role in negotiating the meaning of gender equality in the different institutional contexts. It is widely acknowledged that the concept of gender equality is a 'wicked' one, conceptually contradictory and imprecisely defined. It is, in essence, a political concept that becomes the subject of struggles over its meaning and consequences for action (Lombardo et al., 2009). Thomson et al. (2021, p. 5) stress the importance of 'fostering the less tangible efforts for institutional equality-related change (Sidman-Taveau & Hoffman, 2019), such as group negotiation of meaning' (Annala & Mäkinen,

2017). The TARGET implementing institutions were partially selected because they were located in countries that were 'inactive' in gender equality in R&I at the policy level. A requisite for the call under which TARGET has been funded was that implementing institutions had to be in the initial stages of GEP development. This meant that they were essentially embarking on developing gender equality actions for the first time, so the meaning of gender equality had to be negotiated and discussed from scratch. What gender equality means could not be taken for granted. The lack of importance of gender equality – or at least the denial that gender (in)equalities were a problem – was a common issue in some implementing institutions, including those in countries like Serbia and Romania, where the proportion of women in Grade A positions is above the European average and women are in general comparatively well represented in academia. The National Agency for Quality Assurance in Higher Education (ARACIS) in Romania noted in this regard that the establishment of a CoP focusing on gender equality was initially difficult as gender equality is not a topic that is discussed either in national science and research policy circles or in (higher) education policy. Due to the high representation of women among staff or in management boards, gender equality is not seen as a problematic issue or as a topic that raises a need for action. A similar situation was faced in the UB. Research on gender equality in academia in Serbia highlights that the relatively high score on the UN Gender Inequality Index is often invoked in political discourse to support the claim that the country is doing well with regard to gender equality in higher education, stressing thereby the high levels of women among professors and in decision-making boards. However, empirical research reveals persistent gender inequalities, gendered career possibilities and unequal working conditions in academia for women and men (Ćeriman, Fiket, & Rácz, 2018).

Despite these contextual factors, we have seen throughout the TARGET project how the CoPs have created a forum where the meaning of gender equality has been negotiated and the understanding of the concept has matured. At the beginning of the project, gender equality was conceived primarily as a binary issue of representation (i.e. proportion of women among staff or students at different hierarchical levels or in study programmes). Engagement in the project has seen the concept of gender equality mature and become more complex. At UH2C, for instance, the initial focus on increasing women's presence in decision-making boards through the use of quotas or affirmative action opened a wider debate about deeply rooted prejudices and biases in institutional practices and the need to adopt a comprehensive approach that dealt with cultural and organisational aspects in order to tackle hidden or more overt forms of discrimination. At FRRB, one of the participating RFOs, the initial focus on encouraging female applicants and establishing more equal access to funding paved the way for a broader approach, with the gender dimension in research content becoming an increasingly important element. In a similar vein, the GEPs in several institutions have progressively included efforts to scrutinise processes and procedures that embody gender biases and develop alternative approaches and norms – ranging from the use of gender-sensitive language to the development of an anti-sexual harassment policy.

Community: Dealing with Power and Resistance

One of the main tensions to be grappled with when thinking about CoPs as vehicles for structural change is related to issues of power. CoPs tend to be depicted as horizontal structures devoid of hierarchical power relations – 'communities' are regarded as harmonious spaces where conflict does not arise and consensus reigns. However, structural change for advancing gender equality must either indirectly or, more often, directly confront issues of power and resistance. Challenging the status quo inherently entails disrupting power relations. So how were these two different logics and subsequent approaches reconciled, or at least negotiated, in the TARGET CoPs and to what effect? Who formed part of the CoPs in each institution? Did they include external stakeholders? Was focus placed on top management or more a widely distributed membership? As the CoPs in the TARGET project show, the involvement of top management or adoption of a strategic approach to involving external stakeholders can result in gender equality interventions having a greater impact at both the national, regional or institutional levels.

Ensuring commitment from top management is key to the successful implementation of gender equality interventions in R&I (European Commission, 2012; European Institute for Gender Equality (EIGE), 2016; Palmén & Kalpazidou Schmidt, 2019). All TARGET implementing institutions made a concerted effort to include top management in their CoPs. How this strategy was pursued and negotiated depended on the particular dynamics of each respective institution and ultimately led to different outcomes in each institution, which impacted GEP implementation in different ways. For example, at UH2C, members of the university's top management were formally engaged in the CoP and attended three large, public institutional workshops. Their engagement was a pivotal factor in building commitment for the institutionalisation of gender equality policies in the university that was not initially foreseen in the GEP. In this instance, while top management commitment was key, bottom-up activism was a significant driver of implementation and enabled the broad involvement of university and faculty leaders as well as professors with diverse backgrounds, including gender scholars and gender equality advocates. Obviously, action went on well behind closed doors, with intense formal and informal negotiations during the first stage of the project leading to the approval of the Charter for Equality and the establishment of the Gender Equality Commission at UH2C's highest decision-making body, the University Council. Nevertheless, the formal and public involvement of university leaders in the CoP, coupled with active support from other representatives in high managerial and academic positions, proved to be an effective way to deal with implicit resistance from some top management representatives. A salient feature in this process was the strong involvement of men, either as university leaders or subsequently in the Equality Commission, which is gender balanced.

In the case of UB, while top-level commitment was guaranteed because the rector was a member of the TARGET core team, the real working CoP did not extend much further than the core team. This approach proved both advantages and disadvantags. Gains included a smooth and effective process of design,

approval and implementation of the GEP, which was strategically designed as a low-profile first plan in order to avoid resistance and build consensus for more ambitious gender equality policies in the future. The Gender Equality Committee created by the GEP is the main mechanism to sustain gender equality policies. The creation of this committee has activated a pool of gender scholars, many of whom also have practical expertise in designing and implementing gender equality policies at the faculty level. The main disadvantage was that a change in rector saw the gender equality work faced with a completely new and uncertain scenario.

In the smaller organisations, that is, the RFOs, the quality assurance agency and the RPO, extending the CoP beyond the organisational boundaries proved to be key in fostering change within the local R&I ecosystem, impacting policy at regional and national levels as well as in other RPOs, and kick-starting action within the institutions themselves. For example, the FRRB GEP placed great importance on triggering change for its external beneficiaries (hospitals, research centres and universities located in the Lombardy region). The composition of the CoP reflects this ambition by including (1) FRRB internal stakeholders (management and scientific committee), (2) the scientific community (scientists and researchers who apply for FRRB funding) and (3) policy makers from the Lombardy Region (the regional authority responsible for implementing the main research priorities). Debates within the CoP were instrumental for aligning research agendas and building consensus around the main strategic objectives of biomedical research in the area in relation to gender equality. By coordinating the CoP, FRRB not only raised its steering role as a funding agency but also built internal commitment to and gender competence for the discussion and improvement of gender equality policies.

In the case of the RIF and ARACIS, a similar approach was implemented in a late stage of the process. Initially, the RIF CoP only included internal staff and encountered difficulties in implementing a GEP that included internal measures as well as funding-related measures targeted at potential applicants. The creation of a 'Network of Scientists' that included gender experts from universities in Cyprus was a turning point that enabled the CoP to involve external stakeholders, foster the mutual exchange of knowledge on gender issues in the local scientific environment and gain legitimacy for addressing this topic within RIF. In a similar vein, ARACIS established a CoP involving different universities to debate the need for gender equality policies in Romanian higher education institutions through the development of evaluation criteria, which included the gender dimension for assessing the quality of curricula. This large CoP managed to build a strong consensus regarding the potential impact of such a mechanism and gave internal legitimacy to further advance this line of action within ARACIS.

At the Hellenic Foundation of European and Foreign Policy (ELIAMEP), the initial CoP included different professors, its own board as well as relevant gender scholars from Greek universities. Informal contacts with this group were of great importance in providing advice and encouragement during the initial stage of the process (i.e. the audit and the design of the GEP). Their involvement in the first institutional workshops for all ELIAMEP staff was also of great importance for raising internal gender awareness and strengthening top management

commitment. Since then, the CoP approach has actually been adopted in the regular, monthly meetings of ELIAMEP staff, where gender issues are regularly addressed. In parallel, the TARGET team at ELIAMEP proved quite successful in activating initial contacts with gender scholars and their large network of collaborators in Greek universities to raise the visibility of the institution's GEP as a good practice. They also published various policy papers and a guide to foster the adoption of GEPs in other RPOS. This was supported by recent political changes in Greece (see Anagnostou in this volume).

In general, TARGET CoPs were instrumental in supporting a participatory and evidence-based approach to structural change based on a 'small wins' strategy, which has been recognised as an effective approach to tackling resistance and sustaining change (Callerstig, 2014; Meyerson & Fletcher, 2000). The different CoP approaches outlined earlier also evoke the conclusions of other EU-funded structural change projects. Kalpazidou and Cacace (2017) argue that extending the range of stakeholders involved was a key factor to achieve structural change in the STAGES project. They describe the approach used in STAGES as a 'strategy of successfully widening the circles of actors' (Kalpazidou & Cacace, 2017). Beyond the core team directly in charge of designing and implementing the action plan, the process increasingly engaged other actors – institutional bodies, key institutional players, networks, individuals or groups of people who, in cooperation with the core team, promoted the activities working towards sustainability. The FESTA project also supports the notion that taking a CoP approach to gender equality and structural change in R&I can be an effective strategy to tackle resistance – primarily through its emphasis on engagement and participation. The FESTA handbook, for example, recommends involving more men and women in the organisation's gender equality work as a way to counteract resistance (FESTA, 2016). While the presence of men is important to symbolically counteract the idea that gender equality is about 'women's issues', engaging staff in general in gender equality work is important for building ownership and bottom-up support. Another key recommendation is building networks of people in and outside the organisation who are interested or engaged in gender equality.

Practice: Gender Competence

Practice is one of the three main elements of a CoP approach. CoP literature stresses that practice is essentially what the members of the CoP *do*, and that knowledge is acquired through engaging with practice, in essence *learning through doing*. This approach is congruent with the literature that examines structural change processes for greater gender equality in R&I, which stresses the need for gender competences throughout each stage of the GEP process to ensure successful implementation (Palmén & Kalpazidou Schmidt, 2019; Wroblewski, 2021b). Gender competence is defined by EIGE (2016) as those 'skills, attributes and behaviours that people need in order to mainstream gender concerns effectively into policies and plans and help build gender equality'. It is no coincidence that it is usually gender equality *practitioners* who are charged with facilitating the

structural change process. Zippel and Ferree (2018) reflect on the achievements of the NSF Advance programme in the United Stated, noting how

> An unintended consequence of NSF ADVANCE has been the creation of crucial dynamic of national and local networks of actors with gender expertise. These networks include administrators and faculty who have had or acquired some form of gender expertise during the course of their involvement in ADVANCE, as well as social science researchers who work on gender, STEM and universities.

They go on to state that:

> future research should illuminate how these networks disseminate and bridge both applied and scientific forms of knowledge production, creating the foundation for further self-reflexive processes of institutional transformation both within and across disciplines and systems. (*ibid*.)

This fits well with the CoP approach, which sees competence as developed through practice that manifests through the transition from apprentice to expert via participation in the CoP. In the TARGET CoPs, social scientists come together with natural scientists, mathematicians, statisticians and engineers to work with gender equality experts or practitioners and engage in the practice of developing and implementing a GEP, thereby also developing competence. A significant achievement in this process is that some implementing institutions have been able to strengthen the ties between gender scholars and practitioners, either within the institution (UH2C) or through the establishment of wider CoPs with external stakeholders (FRRB, RIF, ARACIS).

An unintended consequence of GEP implementation using the CoP approach has been the ability of the CoP members to reflect on the process and wider context and adapt the GEP to these broader contextual or procedural developments. As Wenger (2000) suggests: 'practice is the process and knowledge products of the community developed through communication between members' (Barnard et al., 2017, p. 4). For example, while many of the outcomes of the GEP were not initially foreseen, the reflexive approach embodied through practice meant that the CoP facilitated the adoption of new measures or actions that were deemed necessary due to a wide range of institutional and contextual developments. These measures or actions, in turn, often became either the most durable or made the most difference. For example, UH2C created a sustainable institutional structure for gender equality to embed measures within policy and procedures and steer future measures, UB developed a sexual harassment protocol, while ARACIS started to work on criteria to evaluate the gender dimension in university curricula. Placing the emphasis on practice in the context of detecting gender biases in institutional processes or procedures and developing and implementing gender equality actions and alternative non-gendered practices has formed a major part

of TARGET GEP development and implementation. FRRB, for instance, added a statement on gender equality to its Ethics Code and included new clauses in its calls explicitly requiring that project proposals address the gender dimension in the design and implementation of the research as well as the composition of the research team.

Discussion and Conclusions

The CoP approach developed throughout the TARGET project has been a useful method to facilitate successful GEP implementation. While the CoPs established through the project differed in line with the aims and objectives of the respective GEPs and the subsequent involvement of internal and external stakeholders, they have all proved essential in the development and implementation of the GEPs. At a very basic level, the CoPs have provided a forum and space for collaborative working (both *within* an institution – i.e. across functional responsibilities and hierarchical levels – and *across* institutions – e.g. from different sectors yet the same local R&I ecosystem) on a joint project, in our case, promoting gender equality in R&I and higher education. This chapter has focused on three main elements that are highlighted in the CoP literature yet also demonstrate synergies with the gender equality aspect in R&I literature and have been embodied in the experiences of the TARGET CoPs.

Firstly, we highlighted the importance of defining the domain through the negotiation of a shared meaning of gender equality as 'there is a need for creating spaces for the negotiation of the fundamental premises where members involved in common goals can mutually engage' (Annala & Mäkinen, 2017, p. 1954). This process of constructing a discourse around the meaning of gender equality in each institution was seen as key to underpinning the whole process. While there was a tendency at the beginning of the project to conflate and reduce gender equality issues in R&I and higher education to binary notions of men's and women's representation in most institutions, engagement with the project saw how gender equality considerations began to encompass gender bias procedures and processes as well as placing more emphasis on knowledge production through the inclusion of the gender dimension in research content.

Secondly, the project's CoPs encompassed different approaches to dealing with power: some involved strategic top-level management into the CoP (this was attempted in all cases), while others adopted a bottom-up approach. In the universities, engaging top-level management in the CoP meant that internal resistance to the GEP was easier to overcome. In the case of the RFOs, RPO and quality assurance agency, extending the CoP to other external stakeholders proved key in terms of activating the power of the GEP beyond the institution and impacting the local R&I ecosystem either through the direct involvement of policy makers (FRRB) or the inclusion of universities in the CoP and subsequent development of gender-related criteria (ARACIS).

Thirdly, the CoP approach, with its emphasis on practice, proved congruent with highlighting the necessity to develop gender competences for the successful implementation of a GEP. CoP engagement meant that members developed

the necessary competences to carry out a GEP audit, to develop a GEP and to define and apply relevant monitoring indicators. The reflexive process of GEP implementation supported by the TARGET CoPs meant that GEP actions could be revised, and emphasis placed where it was really required. This gave rise to the development of actions that were responsive to the needs of particular institutions at a given time, such as the development of the sexual harassment protocol at UB or the integration of the gender dimension into research content at FRRB.

The CoP approach has seen real gains made for gender equality in terms of highlighting from the start the need to develop strategies for involving internal and external stakeholders (community), building a deeper and more complex understanding of the meaning of gender equality (domain) and developing key competences through the development of actions and reflection on evidence (practice). The TARGET project CoPs also show that while individual agency and activism has been a key driving force for structural change, the support provided by the extended CoP has proved instrumental in making change happen. In the TARGET project, the external funding from the European Commission clearly gave status to the structural change process, thereby (indirectly) supporting the credibility and legitimacy of the CoP and encouraging participation. However, one of the main gains from the CoP approach lies in the learning through *doing* approach – as demonstrated by the implementing institutions' development of capacity to effectively enact change through GEPs.

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Chapter 4

EU Policy and Gender Mainstreaming in Research and Higher Education: How Well Does it Travel from North to South?

Dia Anagnostou

Abstract

Over the past 20 years, the European Union has developed a comprehensive policy on gender equality (GE) in the fields of research, innovation and higher education. While North European countries have actively implemented policies in this direction, South and East European countries have been far less active and made limited progress, resulting in widening policy gaps across countries. Drawing from the experience of a capacity-building project (TARGET), this chapter explores the factors that impede the implementation of gender equality plans (GEPs) in research and higher education institutions across five countries – Greece, Cyprus, Romania, Italy and Serbia. It argues that the lack of a coherent GE discourse in research and innovation policies that sheds light on structural barriers and implicit bias is a central impediment: it severely limits the potential of GEPs and the power of change agents in research and higher education organisations in Southeast Europe to stimulate institutional change.

Keywords: Gender mainstreaming; policy discourse; institutional transformation; Central-East Europe; Southeast Europe; gender equality plan

Overcoming the Challenge of Structural Change in Research Organisations: A Reflexive Approach to Gender Equality, 73–89

doi:10.1108/978-1-80262-119-820221005

Introduction

Over the past 20 years, the European Union (EU) has developed a comprehensive and cross-sectoral policy on gender equality (GE) that extends to the fields of science, research and higher education. Despite being inherently rooted in principles of meritocracy, objectivity and the pursuit of excellence, scientific research is far from being a field that is neutral with regard to social distinctions. In fact, it continues to be permeated by substantial and persistent gender disparities as a voluminous body of evidence and scholarship demonstrates. These disparities distort scientific outcomes and the potential for innovation while undermining social justice. In the light of these facts, the EU incorporated GE as one of the key priorities in the European Research Area (ERA) Roadmap for 2015-2020 (European Research Area and Innovation Committee (ERAC), 2015, pp. 13–14).

The ERA Roadmap encourages Member States and associated countries to adopt domestic policies that promote gender-related organisational change in research, innovation and higher education institutions. West and North European countries have actively implemented policies and programmes in this direction for at least the last decade. They have been proactive, with a few countries standing out as global GE leaders in this domain. Southeast European and Mediterranean countries, on the other hand, are for most part relatively inactive countries; with the exception of Spain, they have only relatively recently begun to integrate a gender and equality aspect into their research and innovation (R&I) policies (Lipinski, 2014, p. 17).

In recent years, scholars have tapped into the knowledge and experience generated in EU-funded projects to explore the factors that facilitate or impede efforts to develop and implement gender equality plans (GEPs) and other related interventions and to assess their effects in promoting structural transformation towards GE (Bencivenga & Drew, 2021, pp. 27–42; Clavero & Galligan, 2021, pp. 1115–1132; Palmén & Kalpazidou Schmidt, 2019, pp. 1–8). Understanding and elaborating on these factors is, however, still in its infancy, particularly in regard to EU and non-EU countries that have only relatively recently started to develop GE measures in scientific research and academia. This chapter contributes to filling this gap by drawing from the experience of a structural change and capacity-building project (TARGET – Taking a Reflexive Approach to Gender Equality for institutional Transformation) funded by the EU Horizon 2020 programme. It explores the factors that apparently impede the implementation of GEPs in research and higher education institutions across five countries – Greece, Cyprus, Romania, Italy and Serbia – all of which can be classified until recently as relatively inactive countries in terms of their policy commitments and initiatives in this area.

A wide policy gap, both at national and at organisational level, has clearly emerged in this area between north and south, within and outside the EU. The 'older' EU Member States (EU-15) are for the most part proactive in promoting GE in national R&I policies. They implement actions that cover nearly all the ERA equality objectives, notwithstanding some partial exceptions. Countries

from Central-East and Southeast Europe (CESE) that joined the EU in the 2000s on the other hand (EU-13) are relatively inactive, as the 2018 Report by the EU's Standing Working Group on Gender in Research and Innovation shows (European Research Area and Innovation Committee – Standing Working Group on Gender in Research and Innovation (ERAC-SWG), 2018; see also Wroblewski, 2020). Such a gap poses a major challenge for the ability of EU R&I policy to inspire and prompt effective national and local responses and to tackle gender inequalities in countries beyond a limited core of strongly motivated and highly committed Member States.

Geographically located in South and East Europe and in the Mediterranean, the TARGET project countries are all among the relatively inactive countries, yet they are far from homogeneous. They comprise countries with very diverse cultures, religions, political systems, levels and modes of economic development, historical and political backgrounds and relations with the EU. Romania and Serbia are two countries that have been profoundly influenced by the legacy of state socialism, its ideology and social-economic development model; the former joined the EU in 2008 and the latter is currently a candidate state (Serbia). In ex-communist countries, the regime prior to 1989 vigorously promoted the entry of women into the labour market and generally sought to increase their participation in social and economic life under the broad rubric of an egalitarian socialist society. In the 1990s and 2000s, these countries sought membership of the EU and incorporated GE goals and policies into their institutional and legal frameworks, in large part in the frame of the EU accession processes.

Greece, Italy and Cyprus, on the other hand, were part of the West in the post-World War II capitalist world and are 'old' members of the EU (with the exception of Cyprus, which joined in 2004). These countries have very different legacies and have achieved levels of GE in various domains that diverge from those in North and West European countries. Whether for reasons to do with their political development, the influence of religion and culture or other factors, these countries followed a belated and slower trend in women's large-scale entry into paid employment as well as in the formal recognition of equal rights for women and men in law and policy.

The participating institutions in the TARGET project are also different organisational entities: some engage in research, others fund research, others are higher education institutions, some are small institutes, others are extended higher education structures. Thus, the kinds of goals to be achieved and the challenges each has faced are quite different. In the light of such far-reaching, cross-national and inter-organisational variation, this chapter does not engage in a systematic comparative analysis. Instead, it primarily seeks to reflect on and deduce some key factors that enable or constrain the implementation of the GEPs, based on the experience of different organisations situated in the countries under focus.

As is well known, GE is a core value that is enshrined in the European Treaties, with legislation in place to promote equal pay, work–life balance,

non-discrimination in employment and access to goods and services, among many other areas.[1] In the past decade, GE and gender mainstreaming (GM) have also been defined as one of the six priorities of the ERA with three objectives: gender balance in research teams and in decision-making structures, and the integration of a gender dimension in research content. The concepts of and approach to GE, as well as the related forms of intervention underlying the EU policy in R&I have been significantly reformulated over the past 20 years. They have evolved from a 'fixing the women' approach to one emphasising 'fixing the institutions', namely to a strategy focusing on structural barriers and institutional transformation (Palmén & Kalpazidou Schmidt, 2019). The first part of this chapter provides an overview of the relevant developments and discusses important shifts in the EU policy approach and discourse around gender and equality in its R&I policy over the past decade.

The existence of a national policy on R&I that gives due weight to gender disparities in line with related EU objectives and approaches provides an indispensable and formative context within which academic and research organisations initiate action to tackle these disparities (or fail to do so). The second part of this chapter thus briefly examines the extent to which related national policies were adopted in the five countries under consideration. The overview and discussion of EU and national policies in the TARGET countries is far from exhaustive and is based primarily on secondary literature and evaluation reports. The third part of this chapter shifts to the organisational level and examines the factors that facilitate or obstruct the development of GEPs in different research and higher education institutions in these countries.

Besides drawing on secondary literature, this chapter relies on data and analyses provided in EU and national legal and policy documents on R&I and GE, comparative assessment reports covering the selected Member States as well as reports evaluating the implementation of GEPs in the research and academic organisations that were partners in the TARGET project. For some of the countries under study, and Greece in particular, it also draws on 10 interviews with staff members at the Hellenic Foundation for European and Foreign Policy (ELIAMEP) discussing the responses and changes that the GEP stimulated at the organisational level. Based on these materials, the analysis in this chapter seeks to identify and reflect on common trends that hinder gender action in research and higher education organisations in Southeast European countries.

In examining the EU and national policy contexts and the efforts of different organisational entities to tackle gender disparities, this chapter pays particular attention to the framing of GE and the corresponding policy discourse. Policy discourse refers to the conceptual frames that underpin the formulation

[1]Articles 2 and 3 of the Treaty of the European Union (TEU); Articles 8, 10, 19 and 157 of the Treaty on the Functioning of the European Union (TFEU). Gender equality is further implemented through Directive 2006/54/EC on the implementation of the principle of equal opportunities and equal treatment of men and women in matters of employment and occupation (recast).

of public policies, the ways they represent a particular issue and social problem, how they understand its causes and how they describe the processes that reproduce it. Public policies are grounded on particular conceptions and framings of issues, which guide decision-makers in determining the areas and forms of intervention. Such conceptions are embedded in policy documents and can reinforce or challenge traditional understandings of an issue (Verloo, Lombardo, & Bustelo 2007, p. 281).

Discourse also refers to the language and arguments that policy makers, social groups and individuals use in social interactions to talk about an issue that is the subject of policy intervention and how it is framed. How they construct particular interpretations of relations between the sexes or how GE is understood directly and profoundly shape efforts to tackle inequalities in social and organisational contexts. As an analytical concept, discourse is premised on the recognition that language and social interaction shape policy. It draws attention to the ways in which 'social problems' or policy problems get 'created' in social interaction (Bacchi, 2000, p. 48). The gender discourse embedded in different policies may make implicit and informal norms about gender roles more explicit. But it may also disguise and remain blind to these.

While the underlying discourse is undeniably a formative factor in the decision-making phase regarding an issue (i.e. GE), its significance and influence are less apparent at the policy implementation stage. The framing of social problems and discursive dynamics among local level and organisational actors is, however, also an important factor in shaping the implementation of policies (Cavaghan, 2017; Ciccia & Lombardo, 2019, pp. 537–538). How policy measures are applied in different local and organisational contexts is significantly shaped by the ideas (deliberate or unconscious) held by the individuals involved in doing so, which steers attention towards some issues and away from others (Ciccia & Lombardo, 2019, p. 542). The actors involved in policy implementation construct, resist and negotiate different framings of problems and solutions (Cavaghan, 2017, pp. 46–47). Implementation can be seen as a field of contestation and power struggles among stakeholders with different aims over meaning and problem diagnosis: some may wish to implement policy as originally intended and mandated from above; others want to modify its goals, slow down or entirely impede its realisation.

This chapter argues that a crucial impediment in the efforts of research and higher education organisations in countries in Southeast Europe and the Mediterranean region to push forward with GEPs is the weakness or lack of a GE discourse to support structural intervention and bottom-up change. Such a drawback is more pronounced in some countries and organisations than in others. A prevalent and strongly entrenched discourse in Southeast Europe is premised on formal equality and highlights women's numerical presence as yardsticks for egalitarianism in scientific research and higher education. The lack of a coherent GE discourse in R&I policies that sheds light on structural barriers and implicit bias is another central impediment: it severely limits the potential of GEPs and the power of change agents in research and higher education organisations in Southeast Europe to stimulate institutional change.

EU Policy on GE in Research and Academia

The perspectives of decision-makers and experts on how to redress persistent gender disparities in academia and scientific research in the EU and Europe have evolved significantly in the past few decades. In the 1980s, the low levels of female recruitment in scientific research were attributed to socialisation from an early age. The internalisation of distinct 'feminine' and 'masculine' roles – including deeply rooted ideas about science as a 'masculine' profession –reproduced the idea that women did not belong in a career that pursued science. Measures to redress women's underrepresentation focused on enabling them to combine family and professional life (Stolte-Heiskanen, 1988). In the 1990s, attention turned from women's entry and qualifications to their retention and career advancement, and policy began to shift from a socialisation to an organisation-based approach (Cronin & Roger, 1999, pp. 637–661). An important milestone was a 1999 European Technology Assessment Network (ETAN) study commissioned by the European Commission (EC)'s General Directorate of Research. It found that while women's presence in science and research increased, they remained underrepresented in senior scientific positions. Few enjoyed equal opportunities to pursue a scientific career, and even fewer to assume a decision-making role in the field of science (EC, 2000).

Over the next decade, the EU policy discourse around gender disparity in R&I gradually and substantially evolved. A critical and highly consequential shift in approach took place that laid emphasis less on women and individuals and more on the institutions that employed women as scientists and researchers. Disparities and sex discrimination were increasingly perceived to be not only or even primarily a result of equal access and opportunity but also a result of persistent and often implicit biases and stereotypes permeating the structures, norms and practices of scientific institutions, which systematically disadvantaged women and undermined excellence. Evidence that had come to light in the previous years revealed that seemingly gender-neutral procedures, like the peer-review system in scientific research, were tainted by phenomena of sexism (Wennerås & Wold, 1997, pp. 321–343, see also Massachusetts Institute of Technology, 1999), and fuelled into the EU's concerns about organisational structures and research institutions. Policy direction shifted away from 'women-change' (or 'fixing the woman') to structural intervention and institutional transformation. We can see this reorientation in the policy domain as coextensive with the increasing resonance of substantive equality concepts in the legal domain and the need to move beyond the traditional understanding of formal equality among individuals.

This reorientation in the EU's approach led to the recognition that GE in R&I cannot be achieved without tackling the systemic barriers that impede the professional advancement of women and their participation in decision-making structures (Ferguson, 2021). The focus shifted from individual support measures aimed at enhancing women's capacity to meet institutional academic requirements to transforming the institutional structures, entrenched practices and cultural norms that prevent women from taking advantage of the equal rights and opportunities guaranteed in law. On this basis, the EU GE policy in R&I drew

from and incorporated different approaches: equal treatment (ensuring men and women are treated the same), positive action (special actions to redress structural disadvantage) and mainstreaming (integrating GE into structures, institutions, policies and programmes) (EC, 2000, p. 2). It identified gender balance in decision-making bodies and institutional practices that reflect and reproduce unconscious bias in assessing merit, suitability for leadership or evaluation performance as key challenges and objectives (Ferguson, 2021). The gender dimension was also to be integrated in the content of scientific inquiry and analysis to tackle bias in knowledge production and improve the quality of the research process and methods.

From 2010 onwards, the EC incorporated GE as a key goal to be mainstreamed as a cross-cutting issue in the ERA – a paramount issue of rights and social justice. It viewed persistent inequalities in research, science and innovation as causing a waste of talent, their overcoming as necessary for opening up to a diversification of ideas and approaches that foster excellence (see EC, 2012, p. 4, pp. 12–13). In 2015–2016, the EU encouraged member states to establish a national policy framework on GE in R&I and to integrate it as a key goal in ERA National Action Plans (NAPs). National authorities were advised to mainstream GE in research and higher education. They were encouraged to do so by creating a legal and policy environment and providing incentives for removing legal and other barriers to the recruitment, retention and career progression of female researchers while fully complying with EU law on GE (i.e. Directive 2006/54/EC); addressing gender imbalances in decision-making processes; strengthening the gender dimension in research programmes; engaging in partnerships with funding agencies, research organisations and universities to foster cultural and institutional change on gender – charters, performance agreements and awards; and ensuring that at least 40% of those from the under-represented sex participate in committees involved in recruitment/ career progression of staff, and in the evaluation and implementation of research programmes (EC, 2012, pp. 12–13).

The EU's broadening of GE policy in R&I, as described above, has led to a deeper framing of GE problems in science, research and academia, rather than to a 'broadening-without-deepening', as Lombardo and Meir (2008) argued about a decade ago. The shift to a focus on gendered organisational processes, structural barriers and the need for structural transformation reflects a deeper understanding of GE from that advanced in the 1990s, which calls into question male standards and norms (Lombardo & Meir, 2009, p. 5). Structural change approaches, adopted by the EU in its GE in R&I policy, go beyond re-balancing opportunities for men and women, and seek equality of outcomes. They shift the emphasis from the individual to cultural and structural causes. They also address the core norms and values (implicit and explicit) prevailing in academia that are thoroughly gendered (Bencivenga & Drew, 2021, p. 29). Formal and informal norms and rules, subtle ones such as shunning, overlooking and social exclusion, act to reinforce and perpetuate gendered structures of privilege and marginalisation at the different levels of the academic hierarchy (Clavero & Galligan, 2021, p. 1118).

In this new policy frame, the EC encourages, and more recently requires, research and higher education institutions to adopt GEPs. GEPs are a key tool

of structural intervention and institutional transformation in R&I. Combatting implicit bias and cultural stereotypes cannot be achieved from above but through efforts at the level of each organisation. Research performing, research promoting and higher education institutions must implement sets of actions and measures tailored to the specific problems and structures of an entity. They shall seek to remove barriers to the recruitment, retention and career progression of female researchers, address gender imbalances in decision-making processes and strengthen the gender dimension in research content (EIGE, 2016, pp. 8–9).

As 'soft' policy instruments, GEPs are often not made compulsory by law. Their adoption and implementation, and the measures they entail, are not binding in the same way as a law or state regulation (EIGE, 2016, p. 17). In this regard, the importance of discursive dynamics at the local or organisational level is even more pronounced in the implementation of tools like GEPs and GM, in which their application into practice is often ambiguous and less likely to be determined from above. There is substantial uncertainty as to what the threefold set of GE goals defined in the EU's R&I policy actually entails in practice.

The approach embodied in GEPs calls on academic and research organisations to impart specific content and meaning into the broad objective of GE and to determine concrete and feasible measures to pursue it. As customised instruments, GEPs are attentive to the need to take into account the varying conditions and views in different countries, regions and institutional settings. Their fundamentally tailored quality is clearly designed to foster motivation for and facilitate bottom-up change. It presumably renders the GEP approach most suitable for pursuing broad GE objectives across a wide variety of national, structural and cultural contexts. While herein lies the strength and potential of GEPs, their thorough reliance on bottom-up perceptions and initiatives may simultaneously become a key source of weakness.

National Policies and Discourses in the TARGET Countries

The Southeast European and Mediterranean countries of the TARGET project partners do not define GE as a priority in their national legislation and policy on R&I. Both at the level of national policy and organisation, the goal of GE is apparently not considered an issue important enough to require intervention. In Romania, for instance, national R&I policies do not contain any GE goals and priorities, while the country's most recent NAP laying out its strategy on research, technology and innovation does not formulate or implement a GE strategy. Equality-related discourse at the national policy level more broadly seems to be defined by non-discrimination. There is substantial opposition to gender-related concepts, as indicated by the legislative initiative to ban 'activities aimed at spreading gender identity theory or opinion' in schools and universities (which was struck down by the Romanian constitutional court in December 2020) (Gascón Barberá, 2020). There is also a lack of a GE discourse in R&I and higher education policy in Serbia. The National Strategy on Scientific and Technological

Development for 2016–2020[2] (the roadmap for integration into the ERA) refers to the improvement of GE at all levels of decision making as a goal, alongside equality for minorities. The National GE Strategy for the same period includes the development of gender studies as a goal to be pursued in Serbian universities (National Gender Equality Strategy 2016–2020, p. 28). However, there is no discussion that elucidates in any way what the goal of GE referred to in these policy documents encompasses.

Cyprus formulated a national strategy on GE in R&I for the first time within its ERA Roadmap 2016–2020. It defined empowering women and encouraging equal representation in decision-making bodies and high-level appointments, improving work–life balance and promoting the integration of the gender dimension in research content as its GE main goals. However, a GE discourse is not (yet) part of the relevant discussions in R&I at the national level in Cyprus.

In light of the above, it should not come as a surprise that – unlike the EU-15 countries – most of the EU-13 countries are far less likely to make institutional change a key element of their national policy framework for GE in R&I (ERAC, 2018, pp. 18–19). Most of the EU-15 countries require the adoption of GEPs at some level (variably in public or private research organisations, universities, public or private sector entities). On the other hand, none of the countries under consideration in this chapter have (at least until 2021) a GEP requirement instituted at the national level through law, policy or strategy that is compliant with the Horizon Europe requirement (ERAC-SWG, 2021).

Even Greece and Italy, two longstanding EU-15 Member States, have only incorporated GE objectives in their policies and strategies on science, research and higher education relatively recently (Greece) or in a limited and fragmented manner (Italy). They have done so in direct reference to the ERA without a clear political commitment to support implementation at the national level. Italian law makes it mandatory for public administration entities, including universities, to adopt positive action plans with the aim to remove all obstacles hindering equal opportunities between women and men at work (through positive action to achieve gender balance where women are underrepresented and measures to promote work–family life balance). The 2014–2020 Italian NAP for R&I invites research institutions to promote equal opportunities, include a gender dimension in research and ensure gender-balanced representation in peer-review selection panels.[3] The prevailing policy discourse on GE is predominantly shaped by equal opportunities, non-discrimination and positive action, albeit disconnected from any understanding of structural barriers and institutional change goals. Over the

[2]See National Gender Equality Strategy of Serbia 2016–2020 with Action Plan 2016–2018. Retrieved from https://www.rodnaravnopravnost.gov.rs/sites/default/files/2018-05/National%20strategy%20for%20gender%20equality%20%282016-2020%29%20with%20Action%20plan.pdf Accessed on 26 October 2021.

[3]See EIGE Factsheet "Gender Equality in research and academia", Italy. Retrieved from https://eige.europa.eu/gender-mainstreaming/toolkits/gear/legislative-policy-backgrounds/italy. Accessed on 28 September 2021.

past five years, this gap has partly been addressed through the involvement of several universities and research organisations in EU-funded structural intervention programmes like TARGET.

In Greece, promoting GE in research, science and higher education was until recently also not on the agenda of national governments and was given a low priority in the country's overall GE agenda. The Greek Strategy for the ERA National Roadmap 2016–2020 defined GM as one of the country's priorities for the first time. It also urged public research bodies 'to establish Gender Equality Plans and to include relevant provisions in their internal regulations and strategic plans' (Ministry of Education, Research and Religious Affairs, 2016). The references to GE in the Greek Strategy for the ERA have, however, been nominal, lacking any accompanying discourse or political commitment to actually implement them. In the past few years, legislation related to higher education and GE in the broader sense (i.e. outside the ERA-related policy) has indirectly advanced efforts to establish GEPs. Legislation to promote substantive equality between men and women has encouraged universities and research organisations to integrate gender into their study programmes and research content (Law 4604/2019, 2019).

Equally importantly, the establishment of Gender Equality Committees (GEC) in all Greek universities by law – as consultative bodies to assist the university administration in its efforts to promote GE – included the development of GEPs among their main responsibilities (Law 4589/2019, 2019). In 2021, the new requirement that research and higher education organisations have a GEP in order to be eligible for Horizon Europe funding has broadened and expedited initiatives to establish such action plans. Beyond Greece, this requirement is a turning point that has already imparted strong motivation among research organisations and universities to seek to develop GEPs across most of the TARGET countries.

The incorporation of GE goals in national policy related to the ERA and in national legislation in the countries under focus is largely nominal. It is rarely accompanied by a discourse on GE that expounds on gendered structures, norms and practices and seeks institutional change. There is little evidence that such a discourse has trickled down to research performing, research promoting and higher education organisations. In so far as any related discussion surfaces in policy documents, it is limited to references to non-discrimination and equal opportunities, or tends to reduce GE to an issue that pertains exclusively to the status of women, as, for instance, is reportedly the case in Serbia (Ignjatović & Bošković, 2013, pp. 425–440). As a recent report assessing the implementation of GE in the frame of NAPs in R&I affirms, achieving GE tends to be viewed as increasing the representation of women in academia and science, while an understanding of structural barriers and implicit biases is entirely absent. The dominant discourse reflects a concern about family values and views the reconciliation of work and childcare as the main problem (Wroblewski, 2020, p. 46).

The development of a rich and cogent gender discourse, it could be countered, should not be expected to emanate top down from policy makers alone (or even

primarily). Instead, committed non-governmental and civil society actors are often far more motivated and knowledgeable in developing and diffusing such a discourse. Civil society actors who mobilise around GE issues have, however, been notably absent in the area of scientific R&I, both at the national and EU levels, and certainly in the Southeast European countries under study. This could change as more stakeholders in academia and research begin to engage with GEPs, push forward a corresponding public discussion and organise themselves collectively.

In sum, prevailing gender discourses in Southeast European countries view persistent inequalities in academia as a problem of equal opportunities and women's underrepresentation, rather than gendered structures. The concept of representation 'mainly focuses on the (lack of) presence of women … [rather than] on gender as an inter-relational category of men and women' (Lombardo & Meir, 2009, p. 13). Women's underrepresentation is not seen to be related to men's positions and roles in academia and scientific research institutions and in the power structures that these relations reflect and reproduce. A discourse that focuses on representation also views women as a homogeneous social group with no reference to how gender intersects with class, ethnicity, race, etc. (Lombardo & Meir, 2009, p. 13). The institutional barriers are rendered invisible when they are perceived as individual in nature. Yet, even if women were finally to break the 'glass ceiling' and reach parity with men in the top structures of academia, it is still doubtful whether those organisations would then operate in a more gender-egalitarian manner (Hamilton, Holmes, & Sowa, 2019, pp. 163–184).

Developing GEPs in Research and Higher Education Organisations in South and East Europe

Prevailing GE discourses that focus on balanced representation and equal opportunities but lack an understanding of structural barriers do not support the implementation of a GEP at the organisational level and may even undermine it (GENDERACTION, 2019, p. 3). This is an overarching and fundamental constraining factor, and the experience of the TARGET organisations in South and East Europe clearly bears this out.

Women's presence in academia has steadily and significantly increased over time in all the countries under consideration. It has increased primarily among PhD graduates but also among university staff, including top academic positions, even if the latter continue to be characterised by a persistent gender gap across most scientific disciplines. Nearly all organisations under consideration had a gender balance in their staff overall, and in some cases even a majority of women. At the same time, women dominated mid-level administrative positions, with their presence substantially reduced in decision-making and top management positions. In some of the TARGET countries at least, factors such as care and family responsibilities and the prevalence of networks of male scientists (especially in decision-making and institutional structures) constrain female researchers from reaching high-rank positions (Hatzopoulos, Kambouri, & Kikis-Papadakis, 2016, pp. 13–14). A widely held perception in the organisations under consideration was

that achieving gender balance and establishing a GE office within an organisation solves the problem of inequalities, without further reflection on its sustainability. Responsibility for change tended to be assigned to women, particularly those in top management positions.

A key initial challenge in developing a GEP within an organisation and assigning the required (and always limited) human resources to do so is to convince top management and a critical mass among the staff that this is an absolutely necessary and worthwhile endeavour. The lack of a well-developed GE discourse at the national policy and organisational levels greatly obstructs this first critical phase. In some TARGET partner organisations, there is a generalised perception within the organisation that there are no inequalities, and this is particularly pronounced where a (near) balanced representation between women and men exists. Such an entrenched perception undermines the ability to trigger a discussion on gender in science and higher education at the organisational and national level. It also presents an obstacle to recognising implicit biases, raising awareness and convincing colleagues and top management of the need for further intervention. It is easier to generate support for tackling disparities in women's representation than for combatting structural barriers and unconscious biases – aspects of social stratification that are at the heart of a substantive conception of equality.

Thus, the inroads that women have made in science and research and their increased presence were repeatedly invoked by staff, management and, in some cases, the leadership to justify their inactivity in developing a GEP and support their view that gender inequalities are not a problem in the organisation. The fact that countries in East Europe show above-average proportions of women in research in a European comparison is used to argue that the gender balance in research should not be a policy priority. The institutional change approach, however, goes beyond 'fixing the number of women' among researchers, which addresses only one of the ERA objectives (gender balance in research teams), but does not address gender balance in decision-making and the gender dimension in research (ERAC-SWG, 2018, pp. 18–19).

In the absence of a developed discourse that focuses on the institutional processes, structures and cultural norms that hinder women from having a career and advancing to higher positions in scientific research and academia, what made a difference in the development of a GEP was (a) support from leadership and top management and (b) the existence of gender-related expertise. With the support of the TARGET project, organisations with a leadership that was committed to the goals of the GEP were able to push forward the gender audit process, the creation of a community of practice and the establishment of a system for the systematic collection of sex-disaggregated data. Those organisations (regardless of size) that had active support from top management and a community of practice (internally and externally) were able to promote GEP implementation and stimulate awareness about GE, even when such a discourse was weak or lacking in the broader national context. They were able to push forward with measures on gender in research content, diffuse the principle of gender balance in their strategic documents and all their activities, including in grant-making procedures. On the other hand, in organisations where top management exhibited reluctance

or resistance, the development of the GEP was delayed, resources were restricted and the goals and actions were narrowed. The organisations that had employees with gender expertise among their staff were also more likely to trigger a discussion about gender disparities from within. They were able to proceed with the audit and implementation of activities and exhibited greater potential for sustainable change.

Change agents in the organisations under consideration placed substantial weight (and hope) on data collection as a means of stimulating a GE discourse internally and countering resistance at the start of the GEP development process. The adoption of procedures for the systematic and sex-disaggregated collection of data on staff and human resources, research and funding activities, and other indicators helped generate valuable empirical evidence, stimulate reflection and increase gender awareness. Data can help to dispel the 'myth of gender-neutral procedures'. Sex-disaggregated data can bring to light disparities that are not easily visible, help identify structural barriers and form the basis for developing compelling arguments on the need for action as well as new kinds of intervention that had not originally been envisaged. The experience of one of the organisations under study showed that sex-disaggregated data can reveal gender disparities that were not previously visible or documented, for example, among speakers and participants who are invited to workshops and conferences as well as in regard to public exposure (i.e. far fewer women researchers who speak to the press and the media). Last but not least, and as was acknowledged, the availability of sex-disaggregated data is critical for addressing and interpreting disparities, such as women's underrepresentation among principle investigators (PIs), and designing appropriate forms of intervention (is it because fewer women apply or due to an implicit bias in evaluation procedures?).

The size and internal structure of an administrative entity has a profound impact on the operation of an organisation and can facilitate or constrain the development of a GEP. Large research and higher education organisations with entrenched administrative hierarchies or decentralised structures are more difficult and slow moving when it comes to making decisions and achieving a broad consensus among the heads of different departments. Studies show the difficulty in effectively displacing the inertia and non-engagement with gender problems in large administrative and organisational settings, even those that spearheaded GE policy in R&I (Cavaghan, 2017, pp. 42–63). Small organisations have the advantage of flexibility and speed in deciding and implementing actions and initiating and disseminating gender knowledge and awareness internally, provided that top management proactively supports the development of a GEP. At the same time, small organisations will have a limited impact if the GEP is confined to internal structural intervention. However, they can act as drivers and multipliers if they use their strategic position and leverage (publicity, exposure, funding, expertise, etc.) to generate awareness, share knowledge and expertise and inspire or motivate gender-related action and policy.

In three of the countries under consideration, the large-scale involvement of many universities and research organisations in EU-funded programmes has prompted them over the past couple of years to increasingly take gender-related

action, including the development of GEPs on their own initiative. Extended and diffused ties and interactions between research and higher education organisations in the frame of the ERA have made them less reliant on national-level legislative and government intervention. The established networks and familiarity with ERA rules and norms have become a source of slowly emerging and diffused GE discourse despite the absence of such a discourse at the national government policy level. As more research and higher education institutions initiate gender action and implement GEPs, this is likely to bolster external (to the organisation) pressure and influence and have a certain 'snowballing' effect, as we can already see in some of the South European countries under consideration.

Concluding Remarks

GEPs as practical tools of structural intervention are premised on a fully formed understanding of structural barriers and implicit biases in scientific research and higher education. While academics have developed and elaborated full-fledged theories on structural inequalities, including those based on gender, much less is understood about how these are manifested in concrete organisational settings. There is also limited certainty as to the practical measures that can effect change. In seeking to drive institutional transformation, which simultaneously encompasses change in individuals, cultures and structures, GEPs are radical tools of a long-term perspective, dressed in technocratic garb.

In the South and East European countries under consideration, where a well-developed GE discourse at the organisational and national policy level conducive to this structural approach is lacking, GEPs should perhaps be seen foremost as key stimulants of awareness raising and new knowledge production. They

> hold the potential to institutionalise collective awareness of gendered policy problems, displacing and challenging the notion that gender 'is not relevant here', with an ongoing process of learning about and engaging with the latest gendered policy problems. (Cavaghan, 2017, p. 59)

As studies show, the prevalence of local representations and discourses on GE and GM may dilute the structural approach that was originally central to GEPs and render the policy less transformative (Cavaghan, 2017, p. 46). The success of GEPs as knowledge-generating processes is perhaps the most important consolidating outcome at this stage in these countries.

Meanwhile, the lack of a shared and coherent GE discourse on gendered structures and practices hinders the ability to pursue common ERA objectives and is particularly burdensome in more inactive countries, like those referred to in this chapter. Governments and involved stakeholders need to initiate such a discourse (Wroblewski, 2020, p. 53). At the EU level, the EC could develop further action in order to facilitate the diffusion of a coherent discourse that elaborates the exigencies of substantive equality and a structural approach to gender change in R&I. The engagement of relevant stakeholders and civil society at the EU and

national levels could critically contribute to and support this task. If GEPs are not supported by such a discourse, there is the risk that they will become mainly bureaucratic tasks.

At the national policy level, any act or signal of official will or incentive to pursue the sustained implementation of a GEP would be crucial to encourage support from top management, broader support among research organisations and universities and willingness to develop effective action plans. Such acts could include making a GEP a precondition in university evaluation and accreditation systems, or more broadly, highlighting GE as a value that the respective education ministry highly regards. At the organisational level, the research organisations and higher education institutions that are participants in the TARGET project – and in many other structural intervention projects – can act as drivers in the development of such a broader discourse.

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Chapter 5

Community of Practice for Gender Equality in the Network of Mediterranean Engineering Schools

Anastasia Zabaniotou, Aigli Tsirogianni, Monica Cardarilli, and Massimo Guarascio

Abstract

Gender competence as part of engineering education can better prepare men and women to work on sustainable solutions that benefit entire societies. This chapter describes the framework and lessons learned of a community of practice (CoP) for gender equality facilitated by the Mediterranean Engineering Schools Network. Faculty and students from Mediterranean European, North African and Middle Eastern countries came together in this CoP, which was supported by the TARGET project, to develop a practical plan using a reflexive approach. The transfer of knowledge between generations is achieved by using participatory learning processes, facilitating mindful awareness, widening experiences, deepening understandings and building a gender-sensitive mindset. Students embarked on the journey to become change agents. The process led to the consolidation of gender equality knowledge, competence building and the development of change agents for gender equality. This CoP can inspire other institutions to undertake a participatory path towards gender equality – at local, regional, or global level.

Keywords: Community of practice; gender equality; education; engineering schools; Mediterranean; network

Overcoming the Challenge of Structural Change in Research Organisations: A Reflexive Approach to Gender Equality, 91–111

doi:10.1108/978-1-80262-119-820221006

Introduction

Achieving gender equality in and through higher education institutions (HEIs) requires a change in culture, structures, norms, dynamics, policies, plans and budget allocation to enable males and females to succeed (Unterhalter, 2019). The European Union (EU) has made considerable efforts in the last decade to advance gender equality in Member States by financing projects to promote communities of practice (CoPs) as tools for change at universities and research organisations (Barnard, Hassan, Dainty, Álvarez, & Arrizabalaga, 2016).

CoPs are self-organised groups of people, informally bound together by a shared vision and context, interacting to exchange knowledge, respond to changes, drive strategy and build expertise. They are learning platforms where members can attend expert meetings and events to exchange ideas and experiences and organise joint projects to achieve common goals (Li et al., 2009). They are knowledge-based dynamic constructs that grow with practice, in contrast to the codified knowledge offered by universities (Kothari et al., 2012). They use a participatory approach to encourage cooperation between stakeholders for overcoming barriers in implementing new concepts (Steins, Veraart, Klostermann, & Poelman, 2021). There are three main characteristics of a CoP (Wenger-Trayner & Wenger-Trayner, 2015): (1) the domain, (2) the community and (3) the practice. These characteristics provide a guide for the development of a CoP (Mohajan, 2017). Although CoPs are like informal networks (Norman & Huerta, 2006) or multidisciplinary teams, they do require leadership and facilitation efforts (Wenger, McDermott, & Snyder, 2002).

Higher education engineering institutions (HEEIs) are in general far from achieving gender equality, although this has partly been accomplished in some universities. In HEEIs, gender inequality is a systemic problem, due mainly to the persistence of the masculine-dominated institutions in patriarchal societies where women do not fully have equal opportunity to reach senior positions and engage in academic career development. This is often related to stereotyped gender expectations and beliefs, and the masculine construct of leadership in those institutions. Furthermore, in HEEIs, the process of gaining gender competence is more complex than in the social sciences, humanities, or management studies because faculty has limited gender equality expertise, while bias and stereotypes are embodied in the system – since engineering was traditionally considered a male domain.

Providing engineering faculty and students with opportunities to come together at the national and international levels to share experiences and reflect on the links between gender interventions and technological innovations is becoming even more pressing (López-Iñesta, Botella, Rueda, Forte, & Marzal, 2020; Tikly, Vogel, & Kurvers, 2020). There is also a need to cultivate CoPs in the context of engineering education to enable a participatory gender equality learning process.

In this context, this chapter reports on the experience gained from a faculty- and student-driven network-based CoP for gender equality advancement within the community of the Mediterranean HEEIs. It also details the lessons learned in the period from 2017 to 2021 when this CoP, facilitated by the Network of

Mediterranean Engineering Schools (RMEI), was drawing on internal and external expertise from the Horizon 2020 TARGET project to better capture gender equality knowledge and good practices from other European countries.

Context

The CoP for gender equality in engineering education in the Mediterranean community was facilitated by RMEI and the student sub-network Giovani Ambasciatori Mediterranei (GAMe) with the support of the TARGET project.

The Network of Mediterranean Engineering Schools (RMEI)

RMEI was created in June 1997 and currently includes around 90 schools from 17 Mediterranean countries.[1] It is also affiliated to the UNESCO UNITWIN Chair of Innovations for Sustainable Development. Its mission is to advance sustainable development in the Mediterranean region through education. The network embraces a diverse range of cultures, religions, political and socio-economic differences that exist among the Mediterranean countries. It envisions equitable and sustainable development for the Mediterranean region. RMEI strives to enhance the ethics of responsibility of young engineers through education and culture, given that education plays a key role in contributing to social transformations. RMEI is a trusting network involving relationships built on common values, dialogue, mutual understanding, friendships and shared responsibility. The dialogue in the network and the sharing of tacit knowledge leads to shared practice, which creates new and collective 'practice-based knowledge'.

RMEI achieved learning potential and inspired informal and structural changes for gender equality among its members by developing a gender equality strategy, unravelled the link between gender equality, sustainability and other Sustainable Development Goals (SDGs) and integrated gender equality into interventions for the sustainable development of the region by mobilising the network's human resources – from professors and students to academic managers (rectors, deans, managers of the schools). The gender equality policy statement was unanimously approved thanks to the commitment of RMEI member institutions to SDGs (Zabaniotou, 2020). The transformative learning and gender equality plan (GEP) implementation process were part of the network's vision for sustainable development and contributed towards a shift from the global challenges and inequalities towards equality through co-existence (Zabaniotou, Boukamel, & Tsirogianni, 2021).

The Young Ambassadors of the Mediterranean (GAMe)

GAMe is an acronym that stands for *Giovani Ambasciatori Mediterranei*, which translates into English as *Young Ambassadors of the Mediterranean*. It is a

[1]http://www.rmei.info/index.php/en/ Accessed on 8 November 2021.

Mediterranean network of students and alumni from RMEI engineering school members. It was founded in 2011 during the First Michelangelo Workshop (MW), which was held at Fort Michelangelo in Civitavecchia near Rome. Its mission is to support students in their personal growth, help them to express themselves through art-based activities and assist them in the development of their characters and social skills to 'break down silos' across disciplines, nationalities and perspectives. It offers opportunities for students to meet in different Mediterranean countries, familiarises engineering students with the Mediterranean cultures, makes students aware of their role in society, prepares them for the future and inspires practical and collaborative learning on gender equality. It is made up of an international board composed of one representative student per Mediterranean country (member of RMEI) and an elected president.[2] The representatives, who are known as *ambassadors*, are both supporters of and supported by the network. GAMe decisions and actions are always in line with its vision on diversity and equality for Mediterranean societies. Furthermore, its members, being more a community than a group, maintain relationships even after graduating from university and becoming alumni. Its strategy is committed to gender equality via the students' work, which it addresses through activities such as workshops, competitions and other initiatives focused on common values, issues and challenges, as well as on raising students' awareness and engagement.

The TARGET Project

Since 2017, RMEI has been a partner in the TARGET project consortium. TARGET aims to contribute to the advancement of gender equality in academia and research and innovation (R&I) and supported the advancement of a GEP at RMEI. The TARGET project emphasised an iterative and reflexive process towards equality at the institutional level as well as the establishment of a CoP for gender equality within the network. Starting point and anchor of the process was a tailored GEP, which was designed, implemented, monitored, self-assessed and evaluated during TARGET.

In this process, RMEI followed the circular and reflexive learning (loop learning) approach proposed by the TARGET project, thereby questioning the assumptions that underlie the actual goals and strategies. The linear approach of following routines that are less risky for the individual and the organisation and afford greater control was avoided in favour of a circular process that facilitates creativity and reflexivity.

The TARGET project partners encouraged knowledge building (as a precondition for success) for cultural change (as the final desirable outcome). One TARGET partner with extensive expertise in gender equality processes supported RMEI but did not take part in RMEI activities, while the financial support from the TARGET project enabled the CoP activities. TARGET proposed a gender

[2]https://www.rmei.info/index.php/activites/michel-angelo-workshop-game/what-is-game [08.11.2021]

equality audit (GEA) as the starting point of the process towards gender equality change, followed by the design implementation, monitoring and evaluation of a GEP.

The logic model approach was likewise proposed by the TARGET project at the different steps in the process in order to provide the network with a road map that described the sequence of related events connecting the need for a planned programme with its desired results. TARGET used a novel evaluation approach that assumes that successful and sustainable implementation of GEPs requires reflection on existing structures and practices regarding inherent gender bias, the development and implementation of alternative practices and the assessment of gendered effects of such interventions (Zabaniotou, Boukamel, et al., 2021).

Conceptual Background

RMEI engaged in a complex process of change for gender equality via the CoP. The transformative processes at the collective and individual levels encompass ways of self-organising, self-learning and self-catalysing. The focus lay on RMEI as a network and thus addressed its member institutions. The members of the CoPs participated on a voluntary basis and regarded the experience as a personal development exercise. In order to develop an alternative framework of change, a 'back casting' methodology was used, that is, a planning method that starts with the definition of a desirable future and objectives and then works backwards to identify activities, methods and roadmaps that will connect that specified future to the present (Holmberg & Robèrt, 2000).

The CoP concept proposed by Wenger (Lave & Wenger, 1991; Wenger, 1998; Wenger et al., 2002) was consulted along with the theoretical framework proposed by Argyris and Schön (1978) in which espoused theories and theories-in-use are used to examine professional practice. Espoused theories refer to the worldview that guides people's behaviours, while theories-in-use refer to the worldview and values reflected in the behaviours that drive people's actions (Savaya & Gardner, 2012). Espoused theories are those that an individual claims to follow, while theories-in-use are those than can be inferred from actions (Argyris, Putnam, & McLain Smith, 1985). According to Argyris and Schön (1978), people use mental maps more than espoused theories to guide their actions. The distinction between espoused theories and theories-in-use framed our questions about the conceptions and philosophies that guide gender equality learning in the Mediterranean cultural diversity.

Complementing the CoP approach, the engineering context offered us some scientific mechanisms that we considered useful for setting up the CoP (Zabaniotou, Boukamel, et al., 2021), namely the 'stigmergy' phenomenon in addressing complex problems of self-organised collective schemes with coordinated actions and interactions of individuals and feedbacks, and the 'spillover' behavioural phenomenon advocating that a person's behaviour causes the adoption of related behaviours by others.

In designing the CoP, we reviewed articles examining transformative processes as mechanisms of working (Karp, 2005) regarding values, collective activities,

narratives and ethical codes. We also searched EU projects for methods that were thematically and structurally applicable, aiming to identify types of actions towards the perceived CoP and adapt them to the specificities of RMEI. The EU ACT project was consulted, for example, because it offers a practice toolkit and an online hub for sharing knowledge and experiences (Palmén et al., 2019).

The RMEI CoP was built around three key elements that address the specific needs of its member institutions:

1. *Domain*: There is a need to build capacity for gender equality at engineering schools to define the knowledge area and practice because many engineering schools in Mediterranean countries lack GEPs.
2. *Community*: There is a need to foster opportunities for learning and practice exchange, along with the development of tools and capacity building, in Mediterranean countries (geographical focus).
3. *Practice*: There is a need to develop solid evidence of good practice on gender equality, based on evaluation.

The Engineering Education Domain

Although continued steps have been made to advance gender equality at HEIs within the EU and institutional changes through GEPs in academia, many differences still exist between countries and scientific fields (EIGE, 2016; Linkova, 2019). Technology and engineering faculties are the most male-dominated in science, technology, engineering and mathematics (STEM), as witnessed by the persistent under-representation of women in promotion committees (Loots & Walker, 2016) and by a glass ceiling in the top-management and senior academic levels (Žalėnienė, Krinickienė, Tvaronavičienė, & Lobačevskytė, 2016). Women in science and engineering fields leak from the academic pipeline, occupying mainly the teaching-intensive positions (lecturer and technical assistant) that eject them from the tenure system as the prerequisite to advance to senior academic positions (Eagly, 2020). This is partly due to the pressures that research-intensive positions put on women with childcare responsibilities (Ginther & Kahn, 2014; Mason, Wolfinger, & Goulden, 2013) and the potential prevailing hegemonic masculine culture within a department or school (Silbey, 2016).

Although the number of female students in STEM subjects has increased remarkably (>50%), gender imbalance is still particularly prevalent in technology and engineering institutions (<20% female representation: Huang, Gates, Sinatra, & Barabási, 2020). Gender equality, however, goes beyond equal representation, also challenging gender-biased processes and procedures. Although women in engineering have often successfully overcome stereotypes in school and family at an early age, when they enter academia, they encounter difficulties in gaining promotion to senior academic positions, frequently due to existing gender norms and bias within the university community that discourage female agency in gaining status in department, faculty and top university positions (Duch et al., 2012). Sometimes, they themselves avoid getting into a male-dominated and heavily

biased environment due to its predominantly competitive nature (Makarova, Aeschlimann, & Herzog, 2019).

The lack of gender equality in the engineering education domain is not only an issue of fairness but also signals a large absence of the potential for growth and innovation (pool of talents), thus resulting in missed opportunities. Schools must adopt a 'whole-institution change' approach that includes transformative leadership and creating a new mindset during change, which occurs in higher education in engineering within a complex system, while the various parts of the system create change agents (Reinholz & Andrews, 2020).

Socially constructed barriers must be dissolved through gender-sensitive initiatives for shaping the future scientific workforce (Loots & Walker, 2016). Women in engineering schools need empowerment to build self-confidence, competence and ability within the academic self-concept, which is based on a self-assessment formed partly through interpretations influenced by the evaluations of male-dominated committees (Ertl, Luttenberger, & Paechter, 2017). To uphold women's rights and fully leverage the potential of women's leadership in the engineering education domain, the perspectives of women must be integrated into the formulation and implementation of policies and programmes (Unterhalter, 2019).

For professional practice, interdisciplinary and transdisciplinary actions are needed that allow engineers to work closely with experts from other fields (social sciences, humanities, etc.), to collaboratively find solutions to social problems (Salvioni, Franzoni, & Cassano, 2017). The openness of professors at engineering schools when it comes to supporting creative ideas from students in the process of solving complex problems also plays an important role.

In the case of the RMEI CoP, it was helpful to use a dynamic process that focused on possibilities and practical solutions rather than on concepts, ideology and opinions to drive gender equality change.

The Aims of the CoP

RMEI envisioned a CoP that would support gender equality processes in engineering education across its member institutions, recognising that HEEIs in Mediterranean countries are comprised of dense networks of masculine power relationships and that interactions, key ideas of excellence and competition guide decisions, affecting women's careers negatively. While girls have achieved an important level of representation among undergraduates in engineering schools, the shares of women in corresponding academic careers and/or with access to power are still low. To pursue this vision, the RMEI CoP formulated multiple objectives:

a. establish an understanding of gender equality among CoP members as the result of an organisational change process;
b. raise awareness for gender bias in culture, values, and language as well as gendered power relations;
c. build knowledge, capacity and dialogue on gender equality by organising local, regional and national workshops (NWs);

d. bring together various national stakeholders in a gender equality discourse;
e. provide a hierarchy-free space for mutual learning based on relationships of trust;
f. empower students to express themselves using Pythagorean approaches (learning through science and art);
g. treat all participants with dignity and respect all cultures when discussing gender equality issues;
h. enhance transparent communication when transferring gender equality knowledge to member institutions; and
i. develop change agents within GAMe and equip students with the competences to raise gender issues in their (future) families and workplaces.

The RMEI CoP

The RMEI CoP called on all member-engineering schools to nominate representatives. The CoP started gradually with a group of people who were willing to learn how to proceed with gender equality change following best practices (Sánchez Milara et al., 2020) and guided by the TARGET partners. Initially, 10 pioneering schools voluntarily joined the CoP. These schools are in Northern Mediterranean countries in Europe (France, Spain, Italy, Greece), Southern Mediterranean in Africa (Morocco, Tunisia, Egypt) and Eastern Mediterranean countries in the Middle East (Palestine, Lebanon).

Faculty members and institution managers from these schools act as change agents for other schools, following the 'spillover' behavioural phenomenon. The RMEI CoP is continually enriched by people of different ages (students, faculty) from various engineering schools in European, North African and Middle Eastern countries, who are engaged in the gender equality process within RMEI. They are all bound by a common vision, shared values and a relationship of trust.

The multigenerational CoP comprises students and faculty of all ages. It is a multinational and multicultural community of representatives of 12 engineering schools (from among the 90 RMEI member schools) in 10 Mediterranean countries (see Fig. 5.1.).

Innovative Aspects of the RMEI CoP

The RMEI CoP is the result of co-creation processes and interventions, collaborative learning, ethical commitment to SDGs, tailored policy mixes aimed at advancing gender equality in typical male-dominated, engineering institutions where women's representation in management and senior faculty positions is low. The important components of the CoP that paved the way for gender equality were the emotional drivers of cognitive, affective trust and joy shared among the members and the feeling of belonging to the same family. The innovative elements and characteristics of the RMEI CoP are shown in Table 5.1.

Fig. 5.1. A Multigenerational, Multinational, Multicultural, Interdisciplinary CoP on Gender Equality Facilitated by the RMEI Network and Supported by the EU-Funded TARGET Project.

Table 5.2 presents the types of CoP participants and their roles.

Gender equality training for managers, faculty and students (participants in the RMEI CoP) was regarded as essential to enable them to understand the challenges and build the capacity and competences needed for mainstreaming gender equality strategies into their institutions. This would, in turn, allow members to construct their own mechanisms for gender equality change, proceed slowly or quickly (set the pace of change) according to the specificities and culture their institution's culture and develop tailor made GEPs that are appropriate in their institution.

A bottom-up approach of co-creation, fulfilment and commitment was used – in stark contrast to the top-down learning imposed in universities. Training workshops and art-based learning approaches were the primary tools chosen to pursue CoP objectives.

Table 5.1. Innovative Characteristics of the RMEI CoP.

No	Element	Need	Approach
1	SYSTEMIC APPROACH	For systemic new thinking, solutions, innovations	The CoP aimed at increasing awareness for gender equality and the corresponding need for cultural and institutional change
2	INTER-GENERATIONAL OBJECTIVE	To inspire all generations and especially young students to become change agents	The CoP is composed of senior professors of Mediterranean HEEIs of all ages and young students from the GAMe network; many other stakeholders are also involved in the dialogues
3	NEW WAYS OF LEARNING	To change the traditional way of learning in engineering education	The CoP established a learning culture in which collaboration, empowerment, courage, trust, and joy replaced competition, uncertainty and fear
4	NETWORK-BASED CoP	To gather people from various universities in a common process of learning	Collective learning took place in trustful networks reaching beyond the classical university-based top-down learning (teacher to student learning); building trust

Table 5.2. Participants in the CoP.

Stakeholders	No	Role
Faculty members from HEEI members of RMEI in the Mediterranean region	15	• Promote the creation of a gender equality committee (GEC) in their respective schools. • Organise institutional workshops (IWs) in cooperation with TARGET partners • Provide feedback to TARGET regarding needs, opportunities and challenges • Develop gender competence among change agents
Top managers in HEEIs (rectors, deans, presidents, etc.)	10	• Authorise the organisation of national workshops (NWs) • Open the NWs • Become change agents in their institutions
GAMe students and alumni	150	• Organise the annual Michelangelo Workshop (MW) • Use creativity to learn gender equality • Use art to understand the change to gender equality • Become future change agents

Activities of the RMEI CoP

When designing training activities, care was taken to ensure a good balance between practical and theoretical aspects, while the national context was also an important factor in shaping activities of the CoP. Different types of workshops were organised, including capacity-building workshops (CBWs), NWs and the MWs (see Table 5.3).

While institutional workshops (IWs) help in gradually building competence and expertise in a journey-like process, NWs bring publicity to each of the organising institutions and the host country. NWs also bring various stakeholders – government ministries, academia, associations, industry, etc. – into the discussion towards formalising a common will on national policies for gender equality. MWs are co-organised annually in a different Mediterranean country by GAMe and mentor professors from RMEI. These workshops aim at bridging science, society and culture regarding awareness for gender equality, discussing topics at the nexus of sustainability – resilience – gender-differentiated vulnerability to climate change disasters.

During the first year of the project, three IWs were held to establish a common level of knowledge on the tools and instruments used to develop, implement and monitor the RMEI GEP. These workshops provided RMEI with knowledge on the structure of a GEA, a GEP and monitoring. Two of the more recent CBWs addressed reflexivity and sustainability issues.

Five IWs were open to the whole CoP. The first IW focused on how to develop a GEA, the second centred on defining gender equality priorities for the GEP, the third and fourth guided the drafting of the gender equality mission statement, which was subsequently presented, discussed and agreed at the network's 2018 general assembly. The focus of the fifth IW lay on the applicability and practicability of the GEP in terms of consolidating a sustainable line of action. This feedback focused specifically on cultural differences between countries, which should have been addressed adequately in the supporting activities.

The NWs aimed at initiating a participatory and stakeholder-oriented dialogue at national level focusing on cultural and institutional change for gender equality. They were co-organised by the member institution in the respective Mediterranean country with the support of RMEI. Other national established gender-based thematic associations and stakeholders were likewise invited to participate (Zabaniotou, 2020).

The MWs were organised by GAMe and were named in honour of the Italian High Renaissance artist, sculptor, architect and poet, Michelangelo (6 March 1475–18 February 1564). MWs were devoted to bridging science, society, culture and gender equality awareness across students and alumni, thus empowering young engineers to practice gender equality in their future lives and work. MWs support cross-disciplinary mindsets through creativity and inclusiveness, empowering a kind of new-Pythagorean spirit through scientific breakthroughs aimed at cooperative harmony across the Mediterranean. Theatre and philosophy born in ancient cultures and Mediterranean societies were used as tools to communicate scientific concepts and share understanding of common values and human

Table 5.3. Description of Activities.

Type of Activity	No.	Goal	Objectives	Outcomes
Institutional Workshops (IWs)	5	Support the reflexive learning approach of gender equality processes among RMEI members	Create knowledge on the process Provide managers with a gender quality mainstreaming mindset Introduce them to the making of cultural change Provide a forum to customise the generic tools developed Address top and middle management Maintain awareness and commitment Support the CoP via the integration of co-operators for gender equality	Learning from invited internationally recognised experts Self-reflexive culture Sustainable implementation of practice Identification of relevant stakeholders New processes and methodologies Feedback from members
National Workshops (NWs)	4	Initiate a gender equality discourse at national level	Participatory approaches List of national stakeholders Cultural change Institutional change Organised at member-institutions in different Mediterranean countries Collaboration with other national gender-based thematic associations and stakeholders Forum for various stakeholders of all ages to discuss social, economic, and cultural barriers that hinder gender equality	Publicity within institution Publicity in the country Bringing together of various stakeholders from ministries, academia, associations and industry in a gender equality dialogue Formalising a common will on gender equality Key priority to promote gender equality and counteract gender bias National context particularities Institutional barriers Main gender stereotypes

Michelangelo Workshops (MWs)	4	Train students and create change-agents for gender equality	Empower students to apply GE in their future lives and work Provide an embedded and embodied learning of gender equality Listen to the testimonies of professionals Involve students in dedicated initiatives Personal development	Theatrical performances, photography and painting competitions helped students to develop a shared vision of the Mediterranean future as *a sustainable, inclusive and peaceful life in a common space*, as stated in GAMe Newsletters[a] Gender-related vulnerabilities by providing real examples of natural hazards and the lack of gender equality preparedness in climate change hazards are addressed (Zabaniotou, Pritsa, & Kyriakou, 2021)

[a]https://www.rmei.info/images/pdf/game-newsletter-activities-and-events-2017.pdf; http://www.rmei.info/images/pdf/game2019.pdf Accessed on 8 november 2021.

connections. MWs aim to broaden students' horizons and promote the significance of a *Common Mediterranean Vision* emerging from a *common history* and envisioning a more inclusive and sustainable development (Demaidi & Al-Sahili, 2021; Zabaniotou, 2020). Shared visions, values, goals and mutual influence encourage dialogue and open communication, with interpersonal interactions that require profound attentiveness and trust.

GAMe students prepared a questionnaire-based survey of students at the affiliated Mediterranean engineering schools to detect students' perspectives of gender inequality and discrimination within the academic environment.[3] The results of the questionnaire were published in a corresponding report and presented in a video at the 2018 MW, confirming the importance of establishing a strategy to reduce gender stereotypes and inequality in and through engineering education. They also stressed the need to raise students' awareness for gender equality issues and participate in activities against gender inequality within their institution. Following the survey, an article on the introduction of the *Gender Issues Strategy* was published in the first edition of the GAMe Newsletter. The newsletter represents an important means to spread a message among students. Students also attended events on gender equality issues, in which they stated their experiences and commitment to this topic. Among the main events, GAMe participated in the international congress on 'Bridging the Future: The Women's Perspective' at the eCampus University in Novedrate, Italy, in 2018, where GAMe representatives gave a presentation on gender equality and rights in education.[4]

Four annual MWs were organised to involve students in a dialogue on global challenges and future foresights. The topic of discussion was at the nexus of sustainability – resilience – gender equality to face the dangers of climate change, whose impacts highlight gender-differentiated vulnerabilities (UNDP, 2020). The 2019 MW focused on the relationship between disaster risk frameworks and gender-related issues to underline the existing discriminations, interfaces and dependencies. The workshop took place at the Sapienza University in Rome and was attended by 60 students, 15 experts and many faculty members. Under the title *Risks & Resilience in Networks and Gender Inequalities*, the MW sought to build bridges among higher education experts and young engineers in the Mediterranean countries[5]. The event promoted an integrated system of transnational research and action plans, bringing together professors (academia), private companies and research institutions from across the region.

The MWs draw attention to statements and strategies implemented through student projects and initiatives. Art and culture are considered the most effective tools for allowing engineering students from different national contexts (different

[3]https://www.jeangilder.it/mw17/wp-content/uploads/2018/01/Game.pdf. Accessed on 8 November 2021.

[4]https://www.nuovefrontierediritto.it/wp-content/uploads/2017/10/Bridging-the-future-The-Womens-perspective-speackers-EU.pdf. Accessed on 8 November 2021.

[5]http://www.cmungo.eu/wp-content/uploads/2019/06/MichelangeloProgramme-Workshop-2019_-ROME.pdf. Accessed on 8 November 2021.

languages and inherited cultures) to fully understand each other. Several keynote speakers from international organisations contributed to the workshops, focusing on intersectionality (i.e. social class, gender, youth, religion, minority groups) and stigma-raising prejudice, discrimination and conflicts, thereby providing the participants with food for thought and further action, facilitating knowledge exchange and the sharing of experiences among students, universities and other relevant stakeholders in Mediterranean countries.

Lessons Learned

- With the RMEI CoP, a dialogue-based, down-top approach to formulating the strategy was applied, with more importance placed on the views and experiences of the participants than on seeking to impose a particular view of the situation. Important lessons learned for the implementation of a sustainable network-based CoP on gender equality are the commitment of the institutions' top managers to SDG5 was essential for adopting the gender equality policy statement.
- A participatory approach (EIGE, 2016) was used in all activities to pursue RMEI CoP objectives.
- It was made clear that with few women in decision-making roles, engineering schools lack inspirational female leaders, which constitutes one of the most formative learning experiences – along with mentoring and widening the belief systems of young people.
- By encouraging and developing new ways of thinking through CoPs and supporting change agents, students can engage with others to tackle gender imbalances throughout their lives and in the future professions.
- Creating an effective and strong CoP takes several years. One of the biggest challenges remains the need to change the deep-rooted, culturally embedded gender stereotypes in academia.

In the following, we will take a more detailed look at the most significant lessons learned.

University Barriers

The effectiveness of the CoP depends on the active role taken by network members (although around 90 Mediterranean engineering schools are members of RMEI, only 12 are active in the CoP for gender equality). The activation of the others (passive members) depends on efforts by the network to inspire them into boosting the willingness of faculty members to work for subjects that are not their core scientific interest (i.e. engineering education and research). In addition, some faculty members do not get actively involved in the CoP because they feel they lack knowledge on gender equality change processes and on social innovations in general.

Many young faculty members are in the tenure clock phase so do not dedicate time to outreach activities that do not count as promotion criteria and

requirements. Instead, they need time and energy to establish academic recognition in preparation for promotion, which requires a heavy teaching load and extensive administrative, scientific and research efforts.

Student members of the CoP move progressively towards their chosen professional path after graduation and only remain on board if they wish to stay connected as alumni. The continuation of CoP activities thus requires continuous efforts to inspire new students to join.

Another very important issue is the fact that participation in the CoP is an unpaid activity (or at least is not financially rewarded). The CoP is organised on a volunteer basis, which sometimes takes a heavy toll and requires paid personnel for organisational support. The lack of funding is a strong limiting factor for the effectiveness and sustainability of the CoP. Its members are volunteers, who give their time and energy to the activities not because they are paid to do so but because they believe in the need for change. This often creates a limitation because many people prioritise their financial needs instead of volunteering for a social task.

Need for Support: Support Received by TARGET Partners and Framework

Advancing gender equality measures in HEEIs requires considerable investment in terms of resources, time, knowledge, skills and institutional accountability to track progress. It was therefore understood that gender equality transformation is a long-term strategic process, which also requires sustained commitment and efforts – as well as specific competences – which tend to be lacking in faculty members at engineering education institutions (Zabaniotou, 2020).

Performing the activities of the CoP required financial support to cover travel, meeting and catering costs, the expenses of invited experts, publication fees, etc. Third-party funding projects like TARGET can provide financial resources for the duration of the project. Without the financial support of the TARGET project, the CoP would have been weak and limited.

Need for a New Gender–Competent Leadership

By enlarging the CoP, attitudes towards gender equality, reflections and feedback would possibly differ. Gender–competent leadership and an understanding of the 'spillover' phenomenon help in homogenising the CoP.

The gender–competent leader should be able to create strategies to support gender equality, analyse gender imbalances, report on related activities, utilise resources in effective ways, communicate online, focus on group discussion and communicate via interviews, videos and digital means. Gender–competent leadership must provide a more profound understanding of attitudes towards gender equality and the CoP. People usually construct gendered meanings in each situation based on their own expectations of the situation. A gender–competent leader needs to be aware of these expectations, recognise when someone's expectations cloud their ability to make meaning and help people through the difficult process of aligning their expectations with their espoused commitments (Argyris, 1991).

Flexibility, team spirit, keeping balance in heterogeneity, distributing responsibilities to the right people, empowering, taking a win-win approach and supporting sustainability are all elements of transformative leadership. Additionally, the CoP facilitator should demonstrate the added value of being an active member of the CoP (e.g. promising to help with publications on collaborative projects, consortium development, networking activities, project partner matching activities), all of which will help members in academic promotions, etc.

Competence Building

The CoP participants can deepen their understanding of systemic inequality and prompt, challenge and inspire each other to make progress towards collective change. CoP members begin a journey of looking inward when it comes to gender equality. They integrate mindful learning and respect for cultural differences and move towards gender-sensitive actions.

Becoming an embodied change agent is like learning something new – it takes time-. With art- and game-based collective learning (GAMe and MW approaches), gender equality can be better sensed and embodied (especially by young students).

Dedicated workshops and training allow CoP members to take a closer look at why many equality actions do not bring a sustainable outcome and how opening hearts with the help of theatre, poetry and philosophy (which past Mediterranean civilisations and ancient communities offered to the occidental and global worlds) can help people to experience the importance of active and collective learning.

Facing the Disruptions

The COVID-19 pandemic limited the possibility for face-to-face meetings of the RMEI CoP. The difficulties were overcome by adopting an engineering approach of problem-solving. At RMEI, CoP activities did not stop but instead followed an alternative path during the lockdowns, namely the path of knowledge consolidation. The CoP members collaborated in preparing interdisciplinary and intersectional publications for peer review journals and dissemination via online tools and digital platforms.

Conclusions

The network-based RMEI CoP of gender equality has an inclusive and intergenerational character; it is composed of faculty and student volunteers from 12 member institutions in the Network of Mediterranean Engineering Schools in 10 countries. It is tailored to the engineering education sector, aiming to better capture gender equality knowledge, share good practices and develop change agents using tailor-made mechanisms.

The RMEI CoP is driven by motivated young engineering students, who share a common vision for sustainable development (GAMe students). It is intergenerational and intercultural because it integrates top managers, faculty and

students of all ages and from different Mediterranean countries in a horizontal engagement in joint activities, negotiation of mutual relevance, peer recognition, identity, trust and commitment to SDGs. People are bound together in a self-assembling process to learn and then lead gender equality change processes in their respective schools.

The RMEI CoP is based on relationships of trust and a sense of belonging to the same family; it creates joy, provides a space for non-experts to share knowledge and ideas on gender equality, gives legitimacy to participants for gender equality activities at their school of origin and enhances the members' commitment to SDG5 by engaging university management. It offers an alternative to the traditional top-down university learning (teacher–student learning), allowing space for uncertainty and addressing persistent barriers to gender equality in the engineering domain across the Mediterranean region. It also offers an attractive alternative to the vertical transmission of knowledge in a university, having a transversal perspective over Mediterranean engineering education systems.

The tangible achievements of the RMEI CoP include gender equality knowledge capacity building, training, awareness, empowerment of members to advocate gender equality in their institutions, establishment of change agents and development of gender competences among members.

A change framework was developed along with a model suggesting avenues for enquiry and opportunities for reflection on how to tackle gender inequality challenges in difficult contexts and domains, with the potential for a scale-up linked to a system-level change. New ways of learning are proposed that include personal development, and awareness of unconscious bias and stereotypes, collaboration against competition, values, character, emotions, knowledge and action value.

In our experience, financial support to cover travel, meeting and catering costs, the expenses of invited experts, publication fees, etc., is indispensable for performing CoP activities. Third-party funding (in our case, the EU TARGET project) provided the financial resources for this CoP. Without the financial support from TARGET, the CoP would have been weak and limited. The TARGET project also provided the knowledge and support to take a participatory, reflexive approach towards building the GEP.

Finally, we learned that becoming a gender equality change agent takes time and practice; becoming a gender equality leader in engineering is a journey.

Acknowledgments

The authors acknowledge all participants and stakeholders of the RMEI CoP.

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Chapter 6

Institutional Mechanisms for Combatting Sexual Harassment in Higher Education Institutions: The Case of the University of Belgrade

Milica Mirazić and Daša Duhaček

Abstract

As a form of gender-based violence, sexual harassment represents one of the most serious obstacles to gender equality in higher education institutions. A systematic and institutional response is required in order for the problem to be regulated. This chapter provides a short overview of the existing institutional mechanisms adopted – with the support system built within the TARGET project – at the University of Belgrade and its member institutions, as a possible and good practice model of institutional interventions dealing with this issue. With three member faculties already having previously introduced their own rulebooks, the first University of Belgrade Rulebook on the Prevention of and Protection from Sexual Harassment was adopted university-wide in 2021. This document represents an important step forward and a substantial support to all the member institutions in the process of regulating the prevention of and protection from sexual harassment and thus contributes substantially to gender equality at all levels of the institution.

Keywords: Sexual harassment; sexual harassment policy; university; gender equality; higher education; gender equality plan

Overcoming the Challenge of Structural Change in Research Organisations: A Reflexive Approach to Gender Equality, 113–124

doi:10.1108/978-1-80262-119-820221007

Introduction

Sexual harassment represents one of the most serious obstacles to gender equality in higher education institutions, and a systematic and institutional response is required in order for the problem to be regulated. The concept of gender-based violence (GBV) is a very important framework for understanding the phenomenon of sexual harassment as a point on the continuum of different forms of GBV (Latcheva, 2017) and a result of inequality and abuse of power. This is extremely important for understanding how sexual harassment as a form of complex power relations in academia as well as in all other institutional settings is related to other forms of violence against and/or discrimination of women. Thus, as one of the forms of GBV, sexual harassment represents a serious structural threat to gender equality if it is not dealt with in a systematic way at the institutional level.

In their recent systematic review of sexual harassment in higher education and other issues, Bondestam and Lundqvist (2020) warn us of the danger of shifting the feminist discourse on sexual harassment as a manifestation of the historically unequal distribution of power between women and men into a strictly judicial discourse that focuses on individual responsibility and an 'individualistic and legislative version of exposure to sexual harassment' (p. 398). However, at the same time, it would seem that in many cases setting up a strong formal and legal framework for the prevention and elimination of sexual harassment in any institutional context represents an important necessary step in the process of achieving a more equal, just and gender-sensitive higher education system for everybody.

With this theoretical framework in mind, the main aim of this chapter is to provide a short overview of the current state of debate, outline the legislative procedures related to sexual harassment in academia and suggest possible next steps in further advancing the whole process of prevention and elimination of sexual harassment at the University of Belgrade. The first University of Belgrade Gender Equality Plan (GEP), together with its newly established gender equality body, has not only opened up the door for a more systematic and thorough approach to dealing with the issue but can also serve as additional tools in the promotion and implementation of policies in this area, especially given the factual and symbolic role the university assumes for its member institutions.

Key Concepts and Definitions

GBV is a broad term that encompasses any form of violence that occurs as a result of unequal division of power between women and men and is deeply rooted in gender inequality. Although the terms 'gender-based violence' (GBV) and 'violence against women' are often used interchangeably because GBV is a phenomenon that in the vast majority of cases affects women and girls, it is important to note the difference in scopes of the phenomenon to which the two terms refer. In short, although GBV does not affect all genders equally, it is a term that can refer to violence against women but also men, boys, sexual minorities or persons with non-conforming gender identities. In contrast, the term 'violence against women' refers to the most common form of GBV.

Although there are different understandings of sexual harassment, European Union (EU) documents most commonly define it as:

> where any form of unwanted verbal, non-verbal or physical conduct of a sexual nature occurs, with the purpose or effect of violating the dignity of a person, in particular when creating an intimidating, hostile, degrading, humiliating or offensive environment. (CoE, 2006)

The key characteristics found in all the definitions is that sexual harassment is an unwanted, degrading and humiliating experience that affects a person's mental and/or physical wellbeing. Even if a person accepts, for example, sexist statements or comments, they can still be humiliating and degrading. Such acceptance can be traced back to fear of retaliation, peer or other types of pressures, social norms and structural inequalities and may therefore not be voluntary (Pandea, Grzemny, & Keen, 2019, p. 31). Sexual harassment can include but is not limited to unwelcome or inappropriate touching, hugging or kissing; sexually suggestive comments, looks, suggestions, jokes or allusions; indecent exposures; sexually explicit emails or text messages that offend someone; sexually explicit pictures, photos or gifts that make someone feel offended; somebody making other people watch or look at pornographic material against their wishes, etc. Sexual harassment in the higher education system can occur in all disciplines and all levels of education (BA students, MA students, PhD students) and in all institutions (all staff). Some analyses show that women often do not speak to anyone about these incidents and, of those who do, only 10 % talk about it with their colleagues or superiors and only 4% contact the police (European Parliament, 2018). Another important fact is that, although both men and women can be victims and perpetrators of sexual harassment, studies show that the majority of the victims are women and the majority of the perpetrators are men. In one study, the European Union Agency for Fundamental Rights (FRA) found that in 86% of cases of sexual harassment, women were sexually harassed by men (FRA, 2014, p. 113).

According to some studies (Resanović, 2021, p. 8), sexual extortion, as one of form of sexual harassment, is particularly present in the context of higher education institutions, especially when it comes to the student–teacher relationship. The root cause lies in the extreme misbalance of power, which provides the person in power (in this case the teacher) with the potential to threaten (directly or indirectly) the victim (in this case the student) into providing sexual favours. Most often in academia, the victim may get the message that the student will not be able to pass the exam or finish their studies or get an appropriate and well-deserved promotion if she speaks about the harassment imposed by her professor, mentor or any kind of superior.

Context

According to available data, sexual harassment is 'one of the most common forms of violence against women in Serbia' (Babovic & Reljanovic, 2020, p. 10).

Recent research has shown that 41.8% of women over the age of 15 have been exposed to some form of sexual harassment (*ibid*., p.11). These figures may also be higher given the stigma and taboo that is related to the topic in a (still) patriarchal Serbian society, an assumption that is backed up by the fact that only a small number of cases are officially reported to the authorities (*ibid*., p. 27). Furthermore, despite the existence of an anti-harassment legal framework (Law on the Prohibition of Discrimination, Law on Labour, Law on Prevention of Abuse at Work, Law on Gender Equality and Criminal Code) in Serbia, its implementation remains lacking and without a proper systematic approach in all areas, including higher education institutions.

The University of Belgrade is the biggest and the oldest state university in Serbia. It is a comprehensive, research-oriented university dedicated to academic excellence. As officially stated in its Mission Statement:

> The mission of the University of Belgrade is to provide superior education and exceptional knowledge to its students, not only in terms of their intellectual growth and development, but also in terms of the growth and development of their human qualities and ethical values, to inspire their desire and inclination to be leaders; to move the boundaries of knowledge and higher education, to promote intellectual surroundings which recognise and honour true values, and to respect and accept human diversity. Devoted to research, education, progress and prosperity, the University of Belgrade strives to set the strongest standards in higher education, to value and encourage intellectual and personal growth and to stimulate meaningful engagement, which serves the well-being of the entire society.[1]

The complexity in the structure of the University of Belgrade is best appreciated and understood by bearing in mind that it consists of 31 faculties, 11 institutes and 1 library. The significance of this in the context of dealing with sexual harassment at the institutional level is the fact that all the faculties and institutes represent separate and legally independent entities according to the statute of the university. This is particularly important since it accords (financial, above all other) autonomy to university members (faculties, institutes, library), allowing them to do business independently like any other firm or company in Serbia. In reality, this means, for example, that the faculties operate led by the demands of the neoliberal market, which has in turn led to significant differences in profit and earnings between the faculties that are 'more in demand' and their less profitable counterparts. Basically, the university does not have the mandate over business matters in the faculties or institutes. Consequently, this leads to a somewhat

[1]See University of Belgrade website: http://www.bg.ac.rs/en/university/mission-statement.php. Accessed 8 August 2021.

decreased overall influence of the university's governing bodies in all decision-making processes, with decisions often made through a complex procedure of negotiations. Nonetheless, all the member institutions are encouraged to harmonise their documents with the university's policies. When it comes to the rights of all members of the educational process, this means in practice that the faculties and institutes aim at least for the level of rights prescribed by the university. This level can be exceeded but should not be less than prescribed in the university's policies.

However, the point that has made a difference with regard to gender equality has been the University of Belgrade's participation in the TARGET project since 2017. One of the main aims of this project is to implement customised GEPs in six European research performing and research funding organisations as part of a sustained, reflexive and participatory institutional transformation process towards enhanced gender equality in institutions of higher education. As a result of this process, the first University of Belgrade GEP was adopted in April 2019. One of the main goals of this GEP was to establish a permanent gender equality body at the university level that would, among other things, be responsible for suggesting activity plans related to achieving gender equality at the University of Belgrade. In May 2019, the 12-member gender equality board was formally established and very well received. The members were purposely selected to ensure a balanced representation of all important university stakeholders: the board includes representatives of all four faculty groups, institutes, teaching and non-teaching staff, students. At its inaugural meeting, the initiative for adopting the university's first anti-sexual harassment policy was presented as one of the priority activities. Another activity organised soon after within the framework of the TARGET project was a co-creation workshop that focused on sexual harassment and provided the participating experts, members of the University of Belgrade community of practice (CoP) and representatives of its partner institutions with an opportunity to discuss ideas, experiences and good practices on developing and implementing anti-sexual policies at the institutional level.

There was also an important contextual incentive to the initiative to adopt an anti-sexual harassment policy at the university level. Several cases of sexual harassment had been reported that year, drawing a lot of media and public attention towards the topic and also creating a space to open up the topic of sexual harassment in the academic context. Among others, the case of Miroslav Mika Aleksic, a well-known drama professor who was accused by more than seven of his current and former female students of abuse and/or rape (Balkaninsight, 2021a), launched an avalanche of '#metoo' stories (Euronews, 2021) that also included cases of sexual harassment within the University of Belgrade (Balkaninsight, 2021b). Another case that particularly resonated throughout academia was the formal accusation of rape submitted by a student of the Faculty of Orthodox Theology against the Vice Dean (Nova, 2020).

Sexual Harassment Policies at the University of Belgrade: From the Bottom to the Top

In order to be able to deal with such cases, there is a need to develop specific, sustainable and self-reflective institutional mechanisms that regulate the problem of sexual harassment in higher education institutions (Resanović, 2021, p. 12). This is especially important since Serbian law allows for many different interpretations of sexual harassment and leaves gaps in regulations and given the specific manifestations of the phenomenon in the academic context. When it comes to the University of Belgrade, the main tools to regulate this issue were previously found in The University of Belgrade's Code of Professional Ethics as well as the rulebooks adopted by certain member institutions (Univerzitet u Beogradu, 2016). Recently, the Rulebook on the Prevention of and Protection from Sexual Harassment at the University of Belgrade was approved by its governing bodies.

The Code of Professional Ethics defines ethical principles governing higher education, publication of scientific results, attitude towards intellectual property, relations between teachers and associates, other employees and students as well as acts of a higher education institution and its teachers, associates and students in legal transactions and in their attitudes towards the public and the media. It is a document that determines in the most comprehensive manner (albeit at a somewhat general level) the obligation to respect the principles of gender equality, including measures to protect the dignity of women (e.g. Univerzitet u Beogradu, 2016, Article 14, which is dedicated to the prohibition of harassment). The Rules of Procedure of the Ethical Committees and the Professional Ethics Committee of the University of Belgrade, adopted in the same year as the Code of Professional Ethics, contain provisions that regulate the procedure in the event of a violation of the Code and prescribe measures for sanctioning such violations. However, they do not set out a specific and detailed procedure for cases of sexual harassment.

Although the Code of Professional Ethics (Univerzitet u Beogradu, 2016) provides a basis for protection against inappropriate conduct, including gender-based discrimination and sexual harassment, it is not concrete enough and does not provide clear procedural instructions on how to act on such cases once they have been reported or noted. Accordingly, developing and adopting specific policies that focus explicitly on sexual harassment was the next important step in developing the University of Belgrade's institutional mechanisms for the prevention of and protection from sexual harassment.

At present, three member institutions have adopted policies in relation to protection against sexual harassment: the Faculty of Political Sciences, the Faculty of Philosophy and the Faculty for Special Education and Rehabilitation. One example of a good practice participatory process in drafting such a document was identified at the Faculty of Political Sciences, which was the first faculty at the University of Belgrade to introduce the Rulebook on Employees' Conduct in Relation to Prevention and Protection against Sexual Harassment and Blackmail of Students at the University of Belgrade in 2014 (Fakultet politickih nauka, 2014). The process was not easy at the time and took about six months. The faculty members and the Dean were very supportive, as were civil society groups.

There was also legal advice on the process. The Centre for Women's Studies (CSO) and the Centre for Gender and Politics (a department in the faculty) were included in the drafting of and discussions surrounding the document. The rulebook is intended to serve to prevent sexual harassment and protect both female and male students against its occurrence. It clearly defines what sexual harassment is and the penalties that are foreseen for any perpetrators. It stipulates that harassment does not only involve unwanted physical contact but also unwanted calls, speech, body contact or emotional persecution. An employee found to have harassed a student is prohibited from further communication with that student and may be fired. Penalties are also envisioned for students who try to misuse the policy. Gender-sensitive language is used systematically throughout the document. The deadline for submitting a complaint of sexual harassment is not stipulated. However, the rulebook only protects students against harassment and not the faculty staff.

In contrast to its counterpart at the Faculty of Political Sciences, the Rulebook on Protection against Sexual Harassment and Blackmail at the University of Belgrade – Faculty of Philosophy, which was approved in 2019, focuses not only on the protection of students but of 'all participants in the educational process', including all situations and persons related to the educational process and not limited to activities within the faculty (Filozofski fakultet, 2019). It defines sexual harassment in more detail and also covers cyber harassment, explicitly including, for example, 'unwanted communication through email, social networks and platforms'. The initial statute of limitation for reporting sexual harassment (10 months for reporting an employee and five months for reporting a student perpetrator) was prolonged in a revised version to last until the end of the student's status in cases where the perpetrator is a staff member and up to two years in cases in which the perpetrator is another student. Since sexual harassment is understood as a breach of work discipline, the sanctions and penalties are well defined by other existing rulebooks.

Similar to the Faculty of Philosophy's Rulebook, the Rulebook on Protection against Sexual Harassment and Blackmail of the Faculty of Special Education and Rehabilitation (FASPER, 2019), which also dates from 2019, covers all staff and students. The statute of limitation for reporting an act of harassment is set at three months from gaining knowledge of the act or six months from the actual act itself.

When it comes to protection procedures, all three rulebooks envision two possible actions that can be taken: consultations or protection measures. However, there are some differences in the specific details on how these actions should be carried out and by whom as well as in the statutes of limitation for reporting the harassment. Also, none of the three rulebooks allows for anonymous complaints to be filed.

As already mentioned, by adopting a participatory and self-reflective process of monitoring the state of gender equality at the university level as part of the TARGET project, a need was recognised for an 'umbrella' policy on sexual harassment. The assumption thereby was that a policy that applied to all member institutions of the university would establish a better basis upon which they could

provide prevention and protection against sexual harassment to their students and staff. Bearing in mind that the member institutions of the University of Belgrade are separate legal entities, and that the university does not have a mandate to impose specific measures on them, this policy needed to be broad enough for all the member institutions to accept it and then be able to implement it; it also had to be specific enough to provide a framework for procedures needed to protect victims. Accordingly, in July 2021, the university's governing bodies adopted the Rulebook on Prevention and Protection from Sexual Harassment at the University of Belgrade. It is the first such policy at the university level and refers to all its member institutions.

The first part of the document contains the institution's full commitment to prohibiting discrimination and any form of abuse or harassment as well as a definition of the target group, which is defined quite broadly: the policy covers students, all university staff as well as all persons in the process of enrolling in any programme at the university. Sexual harassment is defined in line with the CoE definition as:

> any kind of unwanted verbal, non-verbal or physical act of sexual nature that has an aim or effect of violating the dignity of a student or employee; degrading of sex, gender or sexual orientation; leading to acceptance of conduct of sexual nature by promising award or through threat or blackmail; comments regarding sex, gender or sexual orientation that are being made against the will of the other person, as well as sexually intonated body language; suggesting intimacy to an employee or a student against their will, as well as withholding rights or threating to damage honour and dignity of the employee or student for not accepting such suggestion; incitement or leading to behaviour described above. (Univerzitet u Beogradu, 2021, p. 2)

The second part of the document defines procedures for the prevention of and protection against sexual harassment. When it comes to prevention, the document envisions some very important support systems, and this is the part where it is most innovative and progressive. The whole process of 'taking a reflexive approach to gender equality for institutional transformation' certainly played a part in articulating some of the provisions in this rulebook. For example, the university recommends continuous training for 'all the students and employees on all matters relevant to prevention of sexual harassment' (Univerzitet u Beogradu, 2021, p. 3) and also emphasises the role of curricula and textbooks in the prevention of any kind of discrimination or harassment based on sex, gender or sexual orientation. The most important innovation in comparison to the previously adopted faculty rulebooks is the introduction of a commissioner for equality in each member institution. The main role of these commissioners would be to organise training activities with the aim of raising awareness of and preventing sexual harassment. The commissioners will also assume an important role in the procedures of protection against sexual harassment as the persons responsible for initially handling the complaint. The rulebook is, however, less progressive when

it comes to the statute of limitations – setting this at only six months from the (last) time the act of sexual harassment was perpetrated.

Discussion and Conclusion(s)

The process of raising awareness and taking decisive steps towards combatting sexual harassment is complex. This is especially the case in higher education institutions. The process at the University of Belgrade is still ongoing – albeit well on its way –and can be analysed by taking a number of factors into account.

Addressing the issue of sexual harassment in Serbia has recently received increasing attention due to the series of public statements made by young women who testified to being victims of sexual harassment. As of January 2021, Serbia was experiencing a 'me too' movement of its own. For example, the actresses Milena Radulović and Iva Ilinčić made corresponding accusations against Miroslav Aleksić, their teacher in a private drama school (BLIC, 2021); Danijela Štajnfeld likewise accused her fellow actor and politician Branislav Lečić of sexual misconduct (Sabbati & Prpic, 2018); the Faculty of Contemporary Drama at the Belgrade's University of Arts, announced that several cases of sexual harassment had been reported; in the town of Jagodina, the local mayor, a prominent member of the governing party, was accused of sexual harassment; at the Petnica Research Centre, a regular associate was accused of sexual harassment by a number of high school students attending the centre's programmes (N1, 2021).

Importantly, these public statements were made to a long-standing feminist movement, which had been branching out for decades into diverse activities; violence against women was one of the movement's key areas of focus. Some feminist organisations, such as the Autonomous Women's Centre against Violence (established in 1993), which have a very strong presence in the media, offering assistance (legal, psychological, etc.) to victims and are generally very active in raising public awareness of violence against women and the problem of sexual harassment. Other feminist organisations such as the Centre for Women's Studies have invested 30 years into continuous feminist education and have thus contributed greatly to raising public awareness of the same issues. Many other organisations have likewise played an important part in substituting for a lack of reaction in mainstream institutions.

A consequence of this concerted feminist activism is that drawing attention to concrete sexual harassment cases alerts the public – so there was an expectation that the accusations would be processed. Furthermore, women's organisations were – and still are – the main lobbyists for improving the legal framework and its implementation with regard to sexual harassment.

Within this context, special notice was given to the fact that sexual harassment in any educational institution should take into account the far-reaching psychological and professional consequences of the abuse of power in the relations between teacher and student. All of the above is reflected in the work procedures and establishing of rulebooks on sexual harassment at the University of Belgrade. At a broader level, it created the influences corresponding to the bottom-up process in creating gender equality policies, insomuch as it created

public support for establishing and strengthening responses to sexual harassment issues at the University of Belgrade.

The Rulebook on the Prevention of and Protection from Sexual Harassment at the University of Belgrade is a great step forward in combatting sexual harassment in the leading – and one of the most important – institution in the higher education system in Serbia. Combatting this form of GBV was – and still is – especially difficult to address given the misbalance of power in academia between those most likely to be the potential victims and those traditionally in the position to be the perpetrators. That is why it was especially important to have the opportunity to fall back on the GEP, rely on the support of the gender equality board and rector and have the benefit of the experience within the TARGET project.

However, the process is by no means complete. While there are still difficulties being found in each step of the implementation process, there is strong hope is that the support system built during recent years will prove to be sustainable.

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Chapter 7

Promoting Gender Studies in Romania – Working in a Difficult Context

Alina Tăriceanu

Abstract

During the last three decades or so, the introduction of gender studies into higher education in Romania as a field of teaching and research has proved to be a very uneven and sometimes precarious process. The notion of gender has not been properly integrated into scholarly research, and women's and gender studies have therefore been seen as an appendix to mainstream research in the humanities and the social sciences. This chapter aims at providing a meaningful picture of how gender studies have become part of the higher education system in Romania, what challenges have been met on the way and what future gender studies have in the education landscape. It also provides a comprehensive overview of the significance and importance of the TARGET project for the implementation of the first gender equality plan in the Romanian higher education system.

Keywords: Gender studies; gender equality plan; Romanian higher education system; research and innovation; quality evaluation criteria; activism

Introduction

During the last three decades or so, the introduction of gender studies into higher education in Central and Eastern Europe (Romania included) as a field of teaching and research has proved to be a very uneven and sometimes precarious process (Văcărescu, 2012, p. 25). The notion of gender has not been properly integrated

Overcoming the Challenge of Structural Change in Research Organisations: A Reflexive Approach to Gender Equality, 125–141

doi:10.1108/978-1-80262-119-820221008

into scholarly research, and women's and gender studies have therefore been seen as an appendix to mainstream research in the humanities and the social sciences (Daskalova, 2010). Gender studies have long been considered a borrowed concept from Western culture that did not fit the social and political realities of former communist Eastern European countries. Its association with feminist ideology made it even more blurry in terms of the public perspective on the significance of a research field that allows women to express their views and interests.

In the Western world, gender studies have been part of higher education for more than 40 years, and their implementation came as a natural consequence of the political and civic environment. The realities of women's struggle for civic and political rights in Western countries (especially the United States) became the academic and theoretical basis of gender studies (Văcărescu, 2012, p. 27). There was therefore a natural relationship between activism, social movements and politics and the way they became theorised by academic research. After the fall of communism, the Central and Eastern European countries were faced with a totally different reality. The socialist ideology, implemented for more than 50 years, claimed to have removed any kinds of inequities and to have created equality between men and women. The goals of this ideology were mere utopias, a sort of 'Jack of all trades' meant to provide a solution for every problem that the individual might face. The substance, meaning and aims of socialism were never attained, and it became an umbrella under which the traditional roles, gender stereotypes and sexism were maintained. This led to a paradoxical situation in the early years after the fall of communism: acknowledging the reality and accepting the need for change in institutions, practices and policies and, at the same time, rejecting feminism as a 'dangerous ideology' for conservative societies, claiming that it is too early for such profound change or that 'we are not ready for it yet' (Văcărescu, 2012, p. 28).

The aim of this chapter is to provide a meaningful picture of how gender studies have become part of the higher education system in Romania, what challenges have been met on the way and what future gender studies have in the education landscape. To do so, we focus our attention on the following questions[1]:

1. Did gender studies draw their energy from the social and political factors in Romanian society?
2. What were the initial goals of gender studies and what are the current goals?
3. What is their degree of theoretical elaboration and development?

[1]All these aspects were discussed and analysed within the Aspasia Discussion Forum on women's and gender studies in Central, Eastern and South-eastern Europe (CESEE). The idea came from a roundtable on gender studies in CESEE organised by the editor of the academic journal *Aspasia*, Maria Bucur, at the annual conference of the American Association for the Advancement of Slavic Studies (AAASS) in Philadelphia in November 2008. The result of this forum were five texts that were published in *Aspasia* in 2010 and provide a wide picture of the establishment and development of women's and gender studies in CESEE in the last two decades.

4. Is there any current connection between academic gender scholarships and activists in Romania?
5. What is the state of empirical research, and are there any specialised periodicals in women's and gender studies that are important for the development of this field?
6. What are the main obstacles and resistances to the integration of gender into scholarly research?

Providing answers to these questions and discussing every relevant aspect will help us to outline a state of the art in gender studies in higher education in Romania. This, in turn, will allow us to identify the strengths and weaknesses of gender studies and the possible solutions for upgrading their status from an appendix of the social sciences and humanities to an independent and academic field of research per se.

The second part of this chapter is dedicated to the role of the Romanian Agency for Quality Assurance in Higher Education (ARACIS) in promoting gender studies in Romania. More specifically, it describes the first gender equality plan (GEP) in the Romanian higher education system – which was developed by ARACIS – as well as the significance and importance of the TARGET project in this context. Romania is a very specific case in this regard, since the GEP was drafted, implemented and updated within ARACIS, the government quality evaluation agency and not in a university or research institution. ARACIS was established in 2005 as a consequence of Romania's participation in the Bologna process, and its mission is to evaluate the quality of the education provided by higher education institutions and other organisations providing higher education programmes in Romania. ARACIS has therefore set the tone for GEPs and provided a guide for Romanian universities in generating their own GEPs. Furthermore, ARACIS has developed a new set of university evaluation criteria that include gender equality. Accordingly, Romanian universities are now requested to provide specific gender-related data and to address this topic in their internal documents and policies. The chapter goes on to document the TARGET project's contribution to gender studies in the Romanian context, its aims and objectives thereby, what has been accomplished so far and the main outcomes. It is not too far-fetched to say that gender studies in Romania have been indirectly strengthened by the participation of ARACIS in the TARGET project.

The Emergence of Gender Studies in Romanian Higher Education

The emergence and institutionalisation of gender studies as a research topic and academic field around the world has followed different paths. In the Western world (Europe and America), they followed the women's movements of the 1960s and 1970s and their activist agendas and fight for civil, social and political rights (Griffin, 2002). After the fall of communism (1989/1991), women's and gender studies entered the academic programmes in Central and Eastern Europe quite rapidly and in part also successfully (Văcărescu, 2012, p. 41). In the case

of Romania, studies have shown that feminism and gender-related issues were received with scepticism – and sometimes rejected – by the general media discourse and academia (Miroiu, 1998). The inclusion of gender studies courses and establishment of graduate programmes within the higher education institutions happened rather abruptly in the early 2000s (Băluţă & Cîrstocea, 2003, pp. 207-212). Susan Zimmermann provides one explanation for this situation in her research on the institutionalisation of women's and gender studies in Central and Eastern Europe and the post-Soviet space, arguing that:

> the category of gender was used not only for its critical potential of examining existing social, economic and political asymmetries, but also for the means for imposing a specifically western model of liberal democracy and free-market economy. (Zimmerman, 2007, p. 137)

According to Zimmermann, the concept of gender was seen as a 'symbolic marker' of Western culture, democracy and political, social and economic transformation. Her research on the emergence of gender studies in the higher education systems in Central and Eastern Europe outlines three major stages in this process: (1) the efforts and activities of non-governmental organisations (NGOs) and international actors[2] to introduce gender studies in these regions; (2) the 'time of the Americans', i.e., (Zimmerman, 2007, p. 139) the period between 1995 and 2000 when most of the financial support for the establishment of gender studies courses and programmes came from North-American and Anglo-Saxon international organisations[3], and the first steps to institutionalise gender studies within private higher education institutions were taken; and (3) the current phase of European Union (EU) influence, which started in 2000 and is still ongoing. The requirements put down by the Bologna Declaration (1999) accelerated the process of institutionalising gender studies as an academic research and teaching field.

Romania became part of the Bologna Declaration as a candidate country for EU membership. This triggered a number of reforms in the education sector: two cycles of study (undergraduate and graduate), three degree stages (Bachelor, Masters and Doctoral), transferable credits between European universities, high mobility of teachers, students and researchers, and inter-university cooperation at a European level. Besides these practical aspects of the Bologna process, the most important factors that led to the institutionalisation of gender studies in higher education in Romania were the conditions of the *aquis Communautaire*, whereby all candidate countries have to ensure that their education environment provides and promotes equality of opportunities, teaching and research in gender-related areas and mainstreaming (Văcărescu, 2012, p. 43). Romania's status as an

[2]The World Bank, The United Nations, The International Health Organisation.
[3]The Open Society Institute, The Rothschild Foundation, The Fulbright Foundation, The MacArthur Foundation.

EU candidate country also brought about legislative changes that affected the higher education system and influenced the emergence of gender studies programmes in Romanian universities and research institutes. One of the most significant legislative changes was the amendment of the National Constitution in 2003 to include provisions for equality among citizens, the non-discriminatory principle and the right to education granted freely by the state. The first legal provisions for 'equality of opportunities between the sexes' were made in Law No. 202/2002 on the Equality of Opportunities and Treatment between Men and Women (Legea nr. 202/2002, 2002). This was the first time that Romanian legislation had promoted 'textbooks, university courses, guidelines for curricula which do not contain either sex discrimination aspects, or negative models and stereotypes regarding women's and men's roles in public and family life'. The 2011 Law on National Education also stipulates the principle of equal access to all forms of education, irrespective of 'social and material conditions, race, sex, nationality, political and religious affiliation' and 'free of any form of discrimination' (Legea nr. 1/2011, 2011). This law is particularly important for the emergence of gender studies programmes in Romanian universities because it contains an obligation for higher education institutions to promote and implement a code of ethics and professional deontology approved by the respective university senate. Since all Romanian universities are autonomous, the Law on National Education does not provide specific information on the minimum or gender-related requirements for such codes of ethics. The only university in Romania that had already included a reference to gender in its code of ethics prior to the amendment of this law was the National School of Political Sciences and Administrative Studies (SNSPA) in Bucharest. The decision-making body at this university was most definitely ahead of its time, promoting 'the existence of an academic and residential community where each person's dignity is respected in a climate free of any manifestation and form of harassment, exploitation, humiliation, contempt, threat or intimidation'[4] and stating explicitly that the SNSPA does not 'allow misogynistic, racist, chauvinistic, xenophobe, homophobe manifestations and sexual harassment'.[5]

The legal provision that accelerated the process of implementing gender studies programmes in Romanian universities is found in Article 32 (6) of the National Constitution, which guarantees the autonomy of universities. This provision is maintained in the Law on National Education (1995; SPLASH-db.eu, 2014) and its subsequent amendment (2011). This principle is very important as it means that academics can advance and implement any kind of study programme – and decide upon the teaching staff and curricula –with the approval of university leadership alone.

Given the above, it can be said that gender studies appeared as a research/teaching topic in Romanian universities as a consequence of social, political and legislative factors. The political shift towards democracy and the desire to become

[4]http://snspa.ro/wp-content/uploads/2019/10/Carta-SNSPA-2019.pdf, p. 54. Accessed on 11 November 2019.

[5]http://snspa.ro/wp-content/uploads/2019/10/Carta-SNSPA-2019.pdf, chapter VI. Accessed on 11 November 2019.

a member of the EU triggered social and legislative reforms that allowed gender studies to become an active part of university curricula. Personal networks, institutional mechanisms and financial support are further explanatory factors for the establishment of gender programmes in Romanian higher education. The management positions of those academics who promoted gender classes or programmes (deans, rectors, senate members) were also very important for the success of such endeavours. This could, however, be read in both a positive and a negative way. The personalisation of the field could be read positively, as an opportunity to include gender studies in public higher education, and also negatively, as the field was deemed immature, academically illegitimate, with a need to be epistemically validated and with a lack of theoretical authority (Văcărescu, 2012, p. 45).

Past and Present Gender Studies Goals

Another gender studies module was established at the Institute for Cultural Anthropology at BabeŞ-Bolyai University in Cluj in 2000. This was a two-year gender studies module for undergraduate students enrolled in different subjects and offered a graduation certificate (Văcărescu, 2012). A very important aspect that should be mentioned here is that these initial gender courses or programmes were funded exclusively from the state budget through the Ministry of Education. This is something specific to the Romanian case and does not correspond to the three-stage model proposed by Zimmermann (2007) in her research: all the classes, courses and programmes established and institutionalised in Romania before 2000 (in the 'time of the Americans') were funded using public financial resources.

Two further Master's programmes with a gender studies curricula were established in 2003: the Master's in Gender, Differences and Inequalities at BabeŞ-Bolyai University in Cluj and the Master's in Socio-Cultural Gender: Interdisciplinary Approaches at the West University in TimiŞoara. In contrast, to their earlier counterparts, these two programmes benefited from external founding, especially American and British[16]. This was a double-edged sword for the programmes. On the one hand it gave them independence from the state budget, freedom to use international experts to teach certain classes and the possibility to buy books and research materials. On the other hand, their mere existence was dependent on these external financial resources, and they were both discontinued when the funding stopped.

The initial goals of gender studies were those of the academics who had the courage to place them in the higher education landscape. One of the first and most important goals was to educate young students about gender-related issues and make them acknowledge the cultural and social construction of gender, recognise the traditional roles attributed to men and women and study Romanian society and its gender-related issues (Miroiu, 2010). Another was for academics

[6]Through the OSF, the University of Sussex and the University of Nijmegen.

to improve as researchers of women's and gender studies, become more specialised, get in touch with the large community of gender experts and go through a personal metamorphosis. 'All these women are self-made specialists, pioneers in the proper sense, working together to learn gender studies and feminism mostly from American and British scholarship' (Miroiu, 2010, p. 159). Just like any other education process, the one for gender studies aimed to form a new generation of experts, researchers dedicated to the study of this topic and academics who could promote gender studies to other universities. Since Romanian society was itself going through massive changes when gender studies began to be taught in its higher education system, another major initial goal was to educate the political actors and raise awareness of gender as a pivotal concept for public policies and legislation. Acknowledging the fact that the politicians cannot change everything, another goal of gender studies is to educate social workers and specialists for the non-governmental sector – people who can reach out to women in situations of distress, relate to specific issues and make a difference in society.

All of these initial goals are still part of the current agenda for gender studies in Romania. There is a constant need to grow, become better, gain experience and use it for the benefit of both the academic community and society. The academics involved in teaching and researching gender issues are willing to develop tighter communication between universities which provide gender classes or programmes, increase the number of publications and enhance the research on quantitative and qualitative approaches. A present goal of the people actively involved in gender studies is to become opinion leaders in the media and fight the stereotypes that are still promoted in mass and social media – with the higher purpose of generating new role models for future generations. The best way to sum up the current goals of gender studies in Romanian higher education is to quote one of its promoters:

> …we also have obligations towards others, to the stakeholders of our theoretical production. As feminists, our stakeholders are not just our fellow human beings, but human beings *qua* women. We have, in a deep normative sense, a moral obligation critically to reflect upon women's access to freedom, rights, resources, to their access to the production of intellectual knowledge and political expertise. Does our social world represent women's views and interests? Do women fully and equally participate in the design of all social rules and domains? Are they autonomous subjects in a substantive sense? These are, I think, our main issues in the Western and westernised world, as beneficiaries of first- and second-wave feminism. Being on the lucky side of history, living after communism and in the European Union, we also have a moral and intellectual duty to a *global sisterhood*. (Miroiu, 2010, p. 161)

In the following, we outline the path that gender studies took to become part of the academic environment in Romania. The process was relatively quick and started with the introduction of gender components in some undergraduate and

graduate courses in the social sciences and humanities in several Romanian universities in the early and mid-1990s (Văcărescu, 2012).

The University of Bucharest had several faculties where gender and feminism classes were taught between 1993 and 1995: the Faculty of Sociology, the Faculty of Foreign Languages and Literatures and the Faculty of Journalism and Mass Communication Studies (Văcărescu, 2012). Other universities throughout the country also started to provide courses, modules and graduate programmes, such as the West University in TimiȘoara and BabeȘ-Bolyai University in Cluj-Napoca. In 1998, the first Master's in Gender Studies was established at the National School of Political Sciences and Administration in Bucharest.

Degree of Theoretical Elaboration and Development

When addressing the theoretical elaboration and development of institutionalised gender studies in a higher education system, studies indicate that the following six basic phases should be considered (Griffin, 2005, pp. 89-90):

1. The activist phase
2. The establishment phase
3. The integration phase
4. The professionalisation phase
5. The disciplinisation phase
6. The autonomy phase.

It should be noted here that this is just a theoretical model – there is no obligation for these phases to occur chronologically and there could be situations where a study and research field finds itself in more than one stage. Furthermore, some studies claim that no European country has yet reached full institutionalisation of women's and gender studies (Văcărescu, 2012, p. 47). There are also several indicators for estimating the level of theoretical elaboration, development and institutionalisation of gender studies: the number of chairs or professors and lecturers; the presence of autonomous women's or gender studies centres or departments; the academic standing of the teaching and research staff involved; the number and variety of undergraduate and graduate degree programmes; the number of disciplines involved in women's or gender studies; the amount and type of financial support; the research capacity; the recognition of the discipline by the higher education decision-making bodies (Griffin, 2005, pp. 90–91).

In order to assess the level of theoretical elaboration and development of Romanian gender studies, we looked at the educational offer provided within each curriculum. When the first gender classes were introduced in the Romanian higher education system, they were very elective and included gender issues in philosophy, sociology and social work, feminist literary criticism, and gender and media. They were all part of the enthusiasm for a newly discovered field of research, a niche that was worth exploring (Văcărescu, 2012, p. 48). With the passing of time and the specialisation of Romanian researchers in the larger European field of gender studies, new classes and academic perspectives were integrated

into higher education: the construction of gender in advertising, women's history in Romanian society, gender discourses in arts, women and politics, and feminism and political ideologies.

The only Master's programme in gender studies in Romania – the Master's in Politics, Gender and Minorities at SNSPA in Bucharest – is rich in theoretical content. The main areas of research and courses for its students are:

- History of gender and the feminist movement. Ştefania Mihăilescu, who teaches this course, is a leading expert in Romanian feminism from 1815 until 1948 and has published four volumes as well as introductory studies on the topic (Mihăilescu, 2001, 2002, 2005, 2006). Maria Bucur and Mihaela Miroiu, two leading researchers in the field of gender studies, co-edited a book on gender approaches in Romanian political thought. New professional historians are rediscovering the feminist past through historical archives (Alin Ciupală, Roxana CheŞchebec, Ghizela Cosma, Carol Căpită and Simona Stiger as well as many others from younger generations; Miroiu, 2010).
- Feminist theory and the theory of gender. These areas of expertise are covered in the work of five specialist: Otilia Dragomir, Laura Grunberg, Daniela Roventa FrumuŞani, Gabriela Blebea Nicolae and Anca Jugaru.. There are also some significant publications (e.g. *The feminist lexicon*) that include concepts and authors from around the world but also specific Romanian contributions to feminist theories and movements.
- Other classes provided within the gender studies curricula in Romania include women's rights, gender and the media, discrimination and equal opportunity policies, gender and education, gender and pop culture, gender and globalisation, minority rights, ethnic minorities, and the Holocaust. The academics who run the SNSPA Master's programme have made special efforts to include all these in their own curricula. The curricula are flexible and selected by the academic staff, depending upon the available human resources at the time. All lectures and classes in the programme are prepared and delivered by specialists. The interest[7] shown by students towards specific topics and subjects related to gender can also shape the curricula, with some classes being developed further and others being given up or postponed until another generation of students enrol.

Links Between Academic Gender Scholarship and Activists in Romania

Since gender studies are a very recent subject in the Romanian higher education landscape, it is fair to say that most of the academics and experts in this field started their careers as activists or militants for women's rights. This does not

[7]This is usually measured by the number of student theses and dissertations on gender-related topics.

mean that the field of gender studies in Romania is still in its activist phase but simply that it takes time to produce a new generation of experts or activists. Since the number of students is relatively small (around 10 each academic year), it is only logical that the number of activists is also quite small.

The generation of women who introduced gender studies into the Romanian higher education curricula played the role of a 'Jane of all trades' (Miroiu, 2010, p. 161) since they were actively involved both in academia and in civic society. This connection between gender scholarship and activism is better observed at the level of the gender studies programme at NSPSAS. Most of the professors and researchers who teach classes in this programme are also actively involved on a civic level. Renate Weber, for example, was a well-known human rights activist and President of the Open Society Foundation (OSF) in Romania. She is now a Member of the European Parliament. In addition to her professorship, Liliana Popescu was the leading figure in the Civic Education Project, Vice-President of the Romanian Political Science Association and the United Nations Development Programme (UNDP) Coordinator for Programmes for Women in Bucharest. She organised a large protest against domestic violence in April 2000, which was encouraged by and featured prominently in the mass media. Laura Grünberg is well known for her civic actions as the President of Ana, the first Romanian gender-related NGO. Mihaela Miroiu is well known for her public activities against gender discrimination, for building NGOs and higher education programmes, and as a columnist for the journals *Curentul* ('The mainstream'), *România liberă* ('Free Romania') and *Revista 22* ('The 22 review') (Miroiu, 2010). In 2000, in order to offer coherent civic and political actions to complement outreaching and research activities and make room for the new generation of feminists, the staff at SNSPA created the FILIA Centre for Gender Studies and Curriculum Development as an NGO offspring of the gender studies programme. FILIA's presidents, Otilia Dragomir, Ioana Borza and Oana Băluță, have become influential experts and lobbyists. Oana Băluță, Alice Iancu and Alina Dragolea have gained strong reputations for their expertise and effective protests against discrimination and as lobbyists in the Romanian Parliament.

These examples clearly show that there is a strong connection between academic scholarship and gender activism in Romania. Moreover, the current research and teaching staff at SNSPA are also members of the women's civic movement, while activists in turn become students and then experts in gender studies. This proves that there is a high degree of internalisation of gender studies within Romanian society. The academics are aware of the realities faced by women in society, whose experiences become the basis of research and gender theories.

Gender Studies: Empirical Research in Romania

The research capacity of a gender studies programme is one of the most relevant indicators for estimating its level of institutionalisation. This includes access to financing, data and statistics as well as the capacity to develop research teams, coordinate dedicated tasks and get involved in outreach activities as part of the

participatory observation method. Empirical research within the gender studies field in Romanian higher education is quite significant, and a number of studies have already been published. These include a nationwide survey that revealed a pertinent image of grass-roots patriarchy, which was carried out by the OSF and Gallup International, coordinated by Renate Weber and Mihalea Miroiu and published by the OSF. This survey was followed by qualitative research on gender and public policies in post-communist Romania (Vladimir Pasti), gender and rural work (Valentina Marinescu), gender stereotypes in mass media (Laura Grünberg, Ana Bulai and Irina Stănciugelu), gender and political interests in Romania (Alice Iancu, Oana Bălută and Alina Dragolea), gender stereotypes in education (Doina Ştefănescu, Mihaela Miroiu, Laura Grünberg, Otilia Dragomir, Elena Bălan and Cristina Ştefan), and gender and the political parties (Andrei Taranu and Amalia Herciu). Important empirical research was also coordinated by Laura Grünberg and Liliana Popescu, including an analysis of the evolution of Romanian feminism authored by Maria Luiza Vasilescu. A recent empirical research project on feminism and gender in Romania was coordinated by Oana Bălută, while another on women and poverty was overseen by Alice Iancu and Alina Dragolea.

Other current research focuses on the impact of the World Bank and the International Monetary Fund on gender policies in the region (Olivia Toderean), gender and nationalism in the Republic of Moldavia (Rodica Capatici), the gender impact of retirement policies in Romania (Cristina Mocanu), Roma women (Crina Morteanu), the effects of the (non-) application of the Law on Equal Opportunities in Romanian politics (Monica Munteanu), comparative evolution of the institutions dedicated to Equal Opportunities in Europe (Ioana Borza) and gender and migration (Mihaela Cosescu). The Centre for Partnership and Equality in Bucharest, which is part of the Open Society Institute, has also conducted significant empirical research on domestic violence, gender in the labour market and equal opportunities. Important support for such research has been provided by the UNDP in the region. One enduring weakness in this empirical research is that it has been neither sufficiently comparative nor broadly enough focused on Eastern Europe.

Most of the studies and empirical research mentioned above were published in a series of works on gender studies coordinated by the Romanian scholar Mihaela Miroiu at one of the country's most prestigious publishing houses (Polirom). Polirom has published a total of 27 books on this topic to date as well as several translations of international works. The gender studies programme in Cluj also benefited from the support of the publishing house Desire. Cosima Rughinis, an academic at the faculty of Sociology and Social Work at the University of Bucharest, started a new journal dedicated to Romanian sociologists, the *Journal of Comparative Research in Anthropology and Sociology*, which published special issue on 'Men and Women' in 2010. The only Romanian journal dedicated entirely to feminism and gender studies is *AnALize*, which has been published since 1997 under the auspices of *AnA*, with two to three issues edited each year by Laura Grünberg. This periodical has, however, suffered financial difficulties and did not always appear regularly (Miroiu, 2010).

Main Obstacles and Resistance to the Integration of the Field of Gender into Scholarly Research

Although gender studies have become part of the Romanian higher education system more quickly than in other East European countries, the country still does not have a corresponding gender research domain per se. All the programmes that provide students with a gender studies curriculum are regarded as appendices of the social sciences, political sciences or humanities. These programmes are periodically evaluated by ARACIS using the same criteria as any other political science programme, with experts coming from the field of political sciences. By analysing previous qualitative research conducted with members of management and teaching staff involved in gender studies in Romanian universities, we determined that there are several obstacles and areas of resistance to the integration of gender into scholarly research (see the qualitative work done by Theodora Eliza Văcărescu, a lecturer in the Faculty of Journalism and Communication Sciences at the University of Bucharest, i.e., Văcărescu, 2012).

The first major obstacle is the broad socio-cultural and political context that generates a negative perception of gender studies in the academic environment (Văcărescu, 2012, p. 50). Romanian society still tends to define itself as traditional and conservative and finds it difficult to readily embrace Western concepts and mentalities. This definition is translated into the educational system, where specific established scientific patterns are very difficult to change or replace. For example, it is still widely believed that women should study medical sciences, education, psychology or the arts, while men are expected to study technology, IT, engineering or the military sciences.

Another obstacle identified in this qualitative research is the low level of self-realisation of gender studies (Văcărescu, 2012, p. 51). Gender studies have limited legitimacy in Romanian universities and face external contestation especially from experts working in disciplines with strong theoretical background. Gender studies in Romania are still perceived to be below the scientific standards of the West as they constantly seek to attain visibility and validation by addressing the social, political or civic aspects of women's everyday life. The most common reaction of staff members and academics towards gender studies is that there are already other fully established research fields – e.g., sociology, anthropology and the political sciences – that can address, explain and make predictions about gender-related issues. Another contributing factor to the general reluctance towards gender studies as a research field is its incorrect association with feminism. People, including those in the academia, find it difficult to acknowledge that feminism means political action and activism, and is not a university's preoccupation. Feminism can become a research topic, but activism falls under the responsibility of society, NGOs and individuals (Văcărescu, 2012, p. 51). Gender studies are also facing a paradox in terms of experts and institutionalisation. All those staff members who oppose the integration of gender studies into academic research fields claim that there are no real experts who can launch and sustain such a programme. As we have already shown, most of the academics involved in gender studies are self-made experts, people who graduated in other disciplines then

specialised in gender studies over time. Therefore, if there are no experts, there cannot be a self-sufficient research area, and no real experts can be generated. This is a rather vicious circle that cannot be overcome without the willingness and collective efforts of academia and staff. The small number of students, generational gap between researchers, financial aspects and low rates of cooperation on the university boards also count as resistance towards the integration of gender into research. The responsibility for the future of gender studies lies mostly with young researchers and teaching staff. People with strong beliefs, who stand up for their convictions, can be very influential in society and generate meaningful change. The ethics of non-discrimination, equality between people, acceptance of differences and individual autonomy are universal principles that should be present in any research field, not just gender studies.

The Higher Education System and the First GEP – TARGET at ARACIS

The fragmented landscape of gender studies in Romanian academia received a boost in 2018 when ARACIS, the only quality assurance agency for higher education in Romania joined the TARGET project to implement its first GEP. This marked a premiere in the Romanian education system and was a very interesting endeavour, since ARACIS is a government agency and not a university or research institute. Since gender studies have been a research priority for Romanian universities, the first GEP should really have been an academic endeavour. Nevertheless, this GEP marked a very important benchmark for the entire system and sent a clear message that gender equality should be a quality standard for all higher education institutions in Romania. The implementation of TARGET at ARACIS was a lengthy process, marked by different achievements and minor setbacks, and involving not only the entire staff at the agency but also representatives of Romanian universities.

ARACIS's participation in the TARGET project is very important as it is expected to lead to a set of actions aimed at achieving gender equality in science and in all the activities of the organisation. Therefore, one of the first steps taken by ARACIS at the start of the project was to elaborate a GEP that would critically assess the situation in the organisation and correctly identify the main directions that could be followed. The gender equality audit served as an instrument for starting a sustained, reflexive and participatory institutional transformation process aimed at enhancing gender equality within ARACIS and introducing the topic in Romanian higher education. Two main factors were considered in the elaboration of the GEP: the institutional structure and the gender equality context in Romania. The analysis of the external environment ranked Romania lower than other European countries in terms of gender equality. There were several domains related to gender equality where Romania scored rather low, namely work, knowledge, money, time and power. In terms of institutional structure, the GEP aimed at analysing the main gender-disaggregated data available in the organisation, looking at the structure of ARACIS and sex-disaggregated data at all levels of activity. The GEP should ultimately provide a detailed image of the

gender balance within the institution. An ongoing dialogue between ARACIS and the Romanian universities was set up in order to modify the methodology, guides and standards for the quality evaluation process. The aim thereby was to include gender on the list of evaluation criteria for universities. The representatives of the universities were asked to provide ARACIS with details of an umbrella course on gender policies that would be disseminated throughout the entire higher education system. This action demonstrates the important role that ARACIS assumes in promoting gender equality within the research environment and influences the GEP implementation in the long run. When the modification of the evaluation criteria and official methodology became effective, the composition of the permanent commissions at ARACIS would also change. They would then include gender experts with the specific task of evaluating the gender-related criteria provided by each university. In February 2020, ARACIS organised the Fourth Capacity Building Workshop in Bucharest. For the first time since the implementation of TARGET, ARACIS decided to invite the main Romanian universities to attend this event for promoting the TARGET tools and objectives. Our main goal was to expand the community of practice, to send a strong signal to the higher educational system that gender equality is an important quality criterion, that ARACIS is promoting gender-related policies and that we want to work closely with the academic community in order to modify the evaluation methodology by adding gender-related criteria. A working group was set up at ARACIS that includes members of the TARGET project and the university professors invited to the workshop. The main task of this group is to formulate a course on gender policies and demonstrate how it can be introduced into the curriculum.

The GEP has become a referential tool for ARACIS and serves as the basis for developing future gender equality policies. It is the main document taken into consideration when conducting gender audits at ARACIS and drafting periodical evaluation and assessment reports within TARGET. The GEP was made available to the relevant stakeholders through the ongoing activities and dissemination channels of the TARGET project (i.e., meetings, conferences, institutional capacity building workshops). Periodical monitoring and self-assessment reports were also use to provide stakeholders with access to the GEP, which is an internal document at ARACIS that can be modified as the situation requires. The fact that ARACIS is a public institution governed by national laws, makes it rather difficult to frequently change its official documents. The institution's work (human resources, decision-making and evaluations) mostly follows the principle of non-discrimination rather than gender equality. The fact that it receives public funding and is thus governed by law in all of its areas of work helps indirectly to promote gender equality as it ensures equal pay for people in the same positions, equal access to information (for members of the decision-making body), equal access to training and equal access to the social benefits established by law.

The most important institutional strategy that ARACIS is currently working on addresses the drafting, implementation and dissemination of a gender policy paper. Current Romanian education law – which covers both ARACIS and the

universities – does not stipulate the need for a GEP. Therefore, the time was right for ARACIS to modify its evaluation methodology and criteria and ask universities to have and implement their own GEPs. When the gender policy paper at ARACIS has been completed, it will be disseminated to the universities as a good practice guide, along with the recommendation to implement such documents in order to have gender-related data. By doing this, ARACIS can induce the universities to implement GEPs and promote them as quality criteria for further evaluations. The working group mentioned above is responsible for maintaining a permanent dialogue between ARACIS and the universities, in order to obtain the best ideas for the gender policy papers and GEPs that will be implemented by the higher education system.

Conclusions

The analysis has shown that the introduction of gender studies as a field of teaching and research in higher education in Romania included has proven to be a very uneven and sometimes precarious process. The notion of gender has not been properly integrated into scholarly research and women's and gender studies have therefore been seen as an appendix to mainstream research in the humanities and social sciences. The fall of communism faced Eastern European countries with a paradoxical situation: acknowledging the reality and accepting the need for institutional, practical and policy changes and, at the same time, rejecting feminism as a 'dangerous ideology' for conservative societies, claiming that it is too early for such profound change or that 'we are not ready for it yet'. The analysis showed how gender studies have become part of the higher education system in Romania, what challenges have been met on the way, and what future they have in the educational landscape. The social and political factors in Romanian society, the initial goals of gender studies, their degree of theoretical elaboration and development, the current link between academic gender scholarships and activists in Romania, the state of empirical research and the existence of specialised journals on women's and gender studies are the main elements that provided us with a state of the art of gender studies in Romania.

A very strong connection between academia and gender activism can be exploited for the benefit of gender studies. The women's civic movement is mostly comprised of current teaching staff and gender researchers as well as the activists who become students and later experts in gender studies. This proves that there is a high degree of internalisation of gender studies within Romanian society. The academics are aware of the realities faced by women in society, and their experiences become the basis of research and gender theories. Romanian society still tends to define itself as traditional and conservative, with difficulties in readily embracing Western concepts and mentalities. Moreover, this definition is translated into the education system, where specific established scientific patterns are very difficult to change or replace. The strength of gender studies is that it is a non-conventional, modern and attractive subject to many social categories. People with strong beliefs who stand up for their convictions can be very influential in society and generate meaningful change.

During the implementation of TARGET, ARACIS has become actively involved in promoting gender ideas both within the institution and in all the activities that it coordinates. It has therefore gathered relevant data about gender-dedicated study programmes that are available in the Romanian higher education system. An institutional workshop was organised with the professors and staff involved in these programmes to discuss the opportunities they provide as well as the main threats and disadvantages encountered in Romanian society in terms of gender topics. The conclusions and recommendations of these meetings became part of the GEP proposed by ARACIS. Moreover, ARACIS has assumed its role in changing and improving the evaluation criteria for universities and promoting gender equality as a necessary standard for a quality education process. Through these activities, ARACIS is reaffirming its role in promoting gender equality in higher education in Romania.

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Chapter 8

Incorporating the Gender Perspective in Engineering Curricula: The Case of École Centrale Marseille

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Abstract

This chapter aims to present the context, the approach and the pedagogical tools deployed at École Centrale Marseille (ECM) to promote gender equality in engineering education. The ECM has put several mechanisms in place such as challenging traditional gender stereotypes, social representation of the engineering profession and facing the realities of a professional world that is overwhelmingly masculine, including awareness of the glass ceiling effect on access to positions of responsibility and prevention of sexual harassment. The ECM model combines multidisciplinary studies with a professional grounding with the aim of educating students to be able to transform society. In 1997, the ECM founded the Mediterranean Network of Engineering Schools with the main goal of fostering sustainable development in the Mediterranean basin. The ECM has been part of the community of practice on gender equality initiated by Mediterranean Network of Engineering Schools through its participation in the H2020 TARGET project on gender equality in research and higher education.

Keywords: Engineering curricula; social responsibilities; engineering education; gender; sustainability; societal transformation

Overcoming the Challenge of Structural Change in Research Organisations: A Reflexive Approach to Gender Equality, 143–157

doi:10.1108/978-1-80262-119-820221009

Introduction

Reducing the gender gap in engineering education could help to reduce the skills gap, increase employment and productivity and reduce occupational segregation. Fostering gender balance among engineering professionals would also contribute to ensuring that engineering addresses the needs of both women and men. However, there is currently a low proportion of women studying and graduating in engineering in France.

Working towards achieving a better gender balance in the scientific professions, and particularly in engineering, is an ambitious task since the prejudices and fears to be overcome are numerous and, unfortunately, emerge early on in the educational process. At the level of an institution that is located at the very end of the educational chain, the leverages can nevertheless be powerful, including the institution's public voice and those of its employees, but also and above all, by training the main 'users' of the institution, that is, the students, to be actors of change themselves, throughout their professional and personal lives. The workload and the pressures for students in engineering are high, which can be linked to students developing individual and collective behaviours useful for them when they hold positions of responsibility in their future careers (Darmon, 2013).

Equal opportunities and gender issues are not specifically addressed as topics within the preparatory courses required for admittance to engineering degree programmes at École Centrale Marseille (ECM) as these courses are focused on the passing of exams. However, since hazing is prohibited in France (Bill No. 98-468, 1998; Ministry of Higher Education, Research and Innovation, 2011; Sénat, 2010), there are measures in place to prevent sexist behaviour among students during the two years of these *classes préparatoires aux Grandes Écoles* (CPGEs) (Blanchard, Orange, & Pierrel, 2016). In line with the works of Steele and Aronson (1995) as well as Régner et al. (2010) and Régner, Steele, Ambady, Thinus-Blanc, and Huguet (2014) on stereotype threat, many studies emphasise the weight of the fear of failing in scientific streams, which are considered more demanding, thereby frightening off some male and female candidates. However, other mechanisms seem to come into play more in line with traditional gender stereotypes and the social representation of the engineering profession as masculine and have a particular impact on women.

That is why developing the educational curriculum is so important and why it must result in a balance between scientific disciplines, social sciences, as well as activities where students are in charge, and activities that prioritise the discovery and analysis of the socio-economic world. It is in this context, which affects all the professional dimensions of the future engineer, that we must act to effectively raise awareness of equal opportunity and gender issues among students. As stated by Mertus, Mršević, Dutt and Flowers (1995, p. 67):

> The curriculum is one of the main motors in developing stereotypes, in terms of gender roles – expected roles for men and women – as well as in promoting acceptance of such stereotypes. […] But school could also reverse gender role stereotypes and lead the fight against discrimination of girls and women.

In the next section, we briefly comment on the main conceptual and methodological reflections that frame this chapter.

Conceptual and Methodological Reflections

This section provides a brief reflection on some of the literature that looks at integrating the gender dimension in engineering curricular, explains the links between ECM and the TARGET project and provides a brief reflection on the origins of this chapter. Integrating the gender dimension into research content and the curricular in higher education institutions (HEIs) means fostering gender knowledge in all areas. This may include interventions to mainstream the gender dimension in higher education curricular in order to raise awareness and responsiveness to the gender dimension. It can also mean initiatives to foster specialised gender programmes to train researchers (Palmén et al., 2020). Becker, Jansen-Schulz, Kortendiek and Schäfer (2007) describe four ways to integrate gender aspects into tertiary education:

- Transdisciplinary approach: provision of single gender modules open to students from a variety of study programmes.
- Integrative approach: implementation of theory, methods and basic research results as a basic fundamental requirement of teaching and research.
- Particular-explicit approach: provision of programme-specific gender modules or particular modules.
- Explicit approach: provision of specific gender study programmes at all levels of tertiary education.

HEIs can carry out the following activities to integrate the gender dimension: mainstream gender awareness in all curricula (LERU, 2015); include methods of sex and gender analysis and related knowledge in all curricula[1] (LERU, 2015); develop new knowledge and training methods for students and researchers in fields where sex and gender analysis is of special relevance; collect and give publicity to research that has successfully integrated sex and/or gender perspectives (LERU, 2015; Palmén et al., 2020). Although real progress has been made on integrating the gender dimension into the curricular in some fields of study, e.g. health (WHO, 2007; Karolinska Institute – through its doctoral training programme), in other areas such as engineering or physics, less progress has been made. This chapter aims to add to this literature by reflecting on the case of ECM.

While integrating the gender dimension into formal knowledge areas has been the main target area for interventions in the field, it is recognised that there are two types of curricula: an explicit one and an implicit one (Arcos et al., 2006). Tazo, Boyano, Fernandez-Gámiz and Calleja-Ochoa (2020) identify how the former pertains to study plans, learning methodologies, outcomes, competences and evaluation systems, etc. (Wesselink, Biemans, Gulikers, & Mulder, 2017).

[1]See https://genera-project.com/. Accessed 6 December 2021.

The latter reflects sets of thoughts, assessments and beliefs that inform the relationships and practices between people (Pehlivanli Kadayifci, 2019; Tazo et al., 2020, p. 3). It is mainly this second area that has been developed at ECM and which is reflected on in this chapter. We comment on the ECM approach, which includes developing key competences in both the formal and informal curriculum, predominantly to make future engineering professionals aware of gender imbalances in the field, the societal lab, as well as developing a sexual harassment prevention system.

ECM, while not directly involved in the TARGET project as an implementing partner, has been indirectly involved in TARGET through the Mediterranean Network of Engineering and Management Schools (RMEI) network (see chapter by Zabaniotou et al. in this volume). ECM representatives have taken part in TARGET project meetings and other activities including the co-creation workshop that was held on 21st and 22nd July 2021 to look at the 'Resistances to Gender Studies or Gender in Content' and to examine 'Gender in Curricular in STEM'. It is this second subject that is reflected on in this chapter. The aim of these co-creation workshops was to provide a forum where implementing institutions could come together with international experts on these themes and discuss the real challenges that the implementing institutions were facing. Originally, it had been planned to hold the workshop at ECM but due to the COVID pandemic the workshop took place virtually. Experts in integrating the gender dimension in engineering participated and provided concrete feedback to implementing institutions (Englmaier, Wroblewski, Leitner, & Fey, 2021).

In this chapter we present the approach pursued by ECM in incorporating the gender dimension in the curriculum. A central point is the long-standing commitment of ECM on sustainable development – including environmental, economic and social dimensions. In participating in the community of practice on gender equality initiated by RMEI it has been important to reflect on gender issues in engineering and go beyond the concern about gender imbalances. In this vein, the comprehensive curriculum of ECM and its emphasis on ethics and responsibility enables the mainstreaming of social and gender issues in the context of the exercise of the engineering profession and its impact on society.

Gender Imbalances in Engineering Education in France

Engineering education in France differs significantly from the classic European university system firstly due to the recruitment system which, unlike the usual university admissions system, is selective. Most of the *Grandes Écoles*[2] recruit their students from candidates who have successfully passed the competitive entrance exam at the end of an intensive two-year undergraduate course in maths, physics and chemistry known as the *classes préparatoires aux Grandes Écoles* (CPGEs).

[2]In France, the *Grandes Écoles* include the engineering schools mentioned above, but also the business/management schools and some specialised schools such as agronomy or veterinary schools, etc.

The majority of students at French engineering schools come from the general scientific streams of secondary education. In these streams, parity has been more or less assured for several years, for instance 48% of final-year science students were women in 2018. If we look a little more closely at the choices made by students by subject in the final year of secondary education, mathematics, physics and chemistry or environmental sciences do not show very marked differences with regard to gender. The *Baccalauréat*, which is the national examination on completion of secondary education in France, is awarded to more than 93% (success rate) of women (90% for men), indicating that the situation on entering higher education is balanced. Access to the scientific CPGEs is subject to an assessment of the students' competencies, taking into consideration not only the results of the *Baccalauréat* (a score of more than 16 points out of 20 may be required for the best schools) but also overall performance during the final years of secondary education.

Although these criteria should be favourable to women as they achieve better results in secondary education, it is here that we begin to see the first signs of gender imbalances. Indeed, even though women are in the majority in higher education when all disciplines are taken together (128 women compared with 100 men, i.e. 56%), they represent only 42% of students in scientific CPGEs. The filter of academic requirements constituted by the selection process for access to CPGEs should in fact favour women, as 42% of female candidates who pass the scientific *Baccalauréat* obtain an honour grade (each stage of the exams passed first time with an average of more than 12 points) compared with only 37% of male candidates (Ministry of Higher Education, Research and Innovation, 2016). This constitutes not only a pool of brilliant female students that is statistically slightly larger than that of male students, but also a pool of female students who have certainly become aware of their scientific value and potential during their final years of secondary education.

Another obstacle is the weight of popular beliefs about the workload at the CPGEs, which certainly plays a significant role at this stage. While the work required from the students during the two years of preparation for the competitive entrance exams is indeed intense (and, for instance, difficult to reconcile with extracurricular activities requiring any significant time commitment: high-level sports or artistic activities, etc.), it turns out that the failure rate in the CPGEs is the lowest in all of higher education. This has been connected to the personalised guidance that the students receive during their schooling and explains why at the end of the two-year CPGEs the gender balance is more or less the same as it is upon entry.

At the end of the two years of CPGEs, students take the competitive entrance exam for admission to the *Grandes Écoles*. Each school, or group of schools such as the Groupe des Écoles Centrale (GEC), has its own competitive entrance exam. This system enables the emphasis during the exam to be placed on particular scientific disciplines and/or skills. The examination usually consists of a written exam followed by an oral exam that focuses only on scientific disciplines and languages (French and English). For the GEC examination alone, there are approximately 10,000 candidates with a success rate of about 20%. Since men

and women have the same percentage of success in the competitive examination, ECM includes numbers of women in the institution in proportions that are ultimately identical to those found in the CPGEs, i.e. 30% (if we only consider engineering rather than management/business, etc.).

The Case Study of ECM

ECM is a French public HEI specialised in engineering education. ECM is a member of the GEC along with the schools in Casablanca, Lille, Lyon, Mahindra, Nantes, Paris and Beijing, which all share a common vision and culture of training multidisciplinary engineers. Around 2,000 students a year graduate from the five schools located on French territory and are known as *Centralien(ne)*s.

The educational approach of the engineering schools also includes a significant part of the training (30% at ECM) dedicated to the learning about the business world. The schools are authorised to award their engineering degrees by an independent national agency, the French Commission for Engineering Degrees (the *Commission des Titres d'Ingénieurs* or CTI), which periodically audits the schools and authorises them to award their degrees for a maximum of five years. The French engineering degree is equivalent in the European system to a master's degree in science, allowing students to continue their studies at PhD level. There are various ways that ECM has tried to tackle gender biases in engineering, including the societal lab, integrating gender awareness into general competences as well as developing a sexual harassment prevention system.

How Is Training at ECM Designed?

In the two years prior to enrolment at ECM, students have developed their thinking, learnt methods and acquired solid scientific knowledge, which constitutes the foundations on which the engineering programme is built. They have also developed a great capacity for work and concentration in order to pass a difficult examination, and have devoted themselves for two or three years exclusively to their scientific work.[3] During this time, they have not received any training in the humanities or social sciences. As previously explained, training on social and gender issues is completely absent during this preparatory stage although measures to prevent sexism and sexual harassment are in place.

To gain admission to an engineering school, students are selected via a competitive exam consisting of written and oral scientific and language tests. Selection is based only on scientific and technical criteria. The selection criteria are related to the ability to apply scientific reasoning in one or more fields, to demonstrate agility, speed and the ability to make the right choices as well as the ability to adapt to a high pace environment. The proportion of approximately 30% of women in the CPGEs is the same proportion found in the large engineering schools albeit

[3]It is not unusual for CPGE students to repeat their final year in order to try to gain access to the school they have chosen.

sometimes differently distributed among the individual schools. Thus, for the *Grandes Écoles* it is not only a question of increasing this rate, targeting external organisations and stakeholders (for instance, through dissemination and tutoring actions with schoolchildren or by looking for other recruitment channels with the help of the 'Societal lab') but also of working within this framework, that is, engaging with individual and collective behaviour change, tackling biased processes, procedures and practices and developing an awareness and a respect for equal opportunities both within the school and later on.

ECM, aware of this role, has set up an internal structure called the 'societal lab', which aims to strengthen the skills of underprivileged groups (secondary school students and NEETs – Not in Education, Employment or Training) by targeting their academic, professional and personal success. This includes a pedagogical approach aimed at raising students' awareness of ethical and social issues and preparing them to be responsible change agents throughout their professional lives. While the participation of female students in the 'societal lab' contributes to challenging the traditional vision of the engineering profession as masculine, the focus on responsibility, ethical and social issues pave the way to addressing gender issues in relation to the profession and its impact on society.

All the skills acquired in the preparatory classes are used to develop scientific and managerial skills in the engineering school. Teaching includes a core of fundamental and engineering sciences through activities led by research professors who themselves develop research activities at a high level, and through the introduction of social and business sciences. Students' managerial skills are acquired and the building of personal and professional networks is supported through participation in relevant association activities that have historically been very present in the *Grandes Écoles*. Students are thus actors in internal school organisations and clubs that they themselves have set up. They organise major events (parties, sports tournaments, conferences etc.) and engage in civil society associations and not-for-profit activities, promoting teamwork and providing experience of legal and financial responsibilities. This participation and the necessary skills and knowledge acquired prepare them for positions of responsibility.

The 'Centralien' Skills Reference Framework: Integrating Gender Equality into the General Competence Framework

The GEC schools have defined a common vision for the engineering degree and share a common training model that is adapted to the specificities of each school's location. In a world of complex and rapidly changing interactions, ECM engineers must integrate high-level scientific knowledge with the ability to innovate and lead change in the face of the various challenges facing our society: environmental, economic, and social, including those challenges related to tackling gender and all kinds of social inequalities. According to this vision, *Centralien* engineers are capable of:

1. creating value through scientific and technical innovation;
2. mastering the complexity of the systems and problems they encounter;

3. managing programmes;
4. managing in an ethical and responsible way; and
5. having a strategic vision and knowing how to implement it.

ECM's goal is to train engineers who are actors in innovation and transformation, capable of acting quickly and effectively in complex and changing environments. This ambitious target requires the development of behavioural, relational and systemic skills, as well as a form of personal knowledge and mastery, in addition to the indispensable scientific knowledge. The GEC schools rely on the fact that these subjects can be effectively addressed within the initial training programme, thereby accelerating graduates' progress within the company even more in the first few years of their careers. These transversal skills are based on a multidisciplinary scientific foundation featuring a broad spectrum (mathematics, computer science, mechanics, physics, chemistry and processes, human and social sciences, business sciences), as well as on language and international culture courses, which must be successfully completed without any gaps.

The managerial dimension is emphasised not only in the spirit of programme management, including the scientific and human aspects, but also in the spirit of contributing to the development of visions and strategies that may lead to change. It is essentially the choice of the fourth competency (managing in an ethical and responsible way) that has enabled us to introduce respect for individuals and an ethical and responsible awareness, which includes equal opportunities and gender issues as a fundamental value.

Ethical and responsible management: the emphasis is placed on how to design, operate and develop management systems, taking into account all their dimensions, whether technical, human, professional or cultural. Students are constantly concerned with optimising performance and results through ethical and responsible questioning (respect for individuals and the common good, critical thinking and humility), in order to leave a positive mark on their actions and management.

If the scientific foundation remains the basis, the question arises of also how these managerial skills can be developed to the right level, which requires, throughout the three years of training, interactions on various levels with different audiences and with professionals. We must create a system that generates mutual enrichment between the academic and professional components. Learning situations and environments need to be diversified. The size of the cohorts present on campus in the same training programme (300 students per class) represents both an undeniable asset in terms of creating real-life situations as well as an obvious difficulty when it comes to thinking about tailoring the curriculum on a large scale. It is in this context that throughout the three years the topics of equal opportunities and questions about gender stereotypes must be addressed, including a focus on the various different issues involved, and through varied and repetitive activities. Indeed, not only do we want ECM students to develop and evolve in a welcoming, inclusive and caring community but also to become future managers capable of sharing these values with their teams and within their companies.

A New Generation with High Expectations: Activism

The students who join us quickly mobilise within the community they create and lead. From the beginning they are made aware of the issues related to sexist abuse and potential violence within the framework of civil society association activities, while these student organisations are very active on all issues related to discrimination (National Office of Student Engineers, 2021). Despite this, practises may still support behaviours related to power (Engineers Without Borders) that need to be challenged. For several years now, we have seen the creation of highly mobilised student movements, which are often supervised by the Student Offices' wish to develop militant actions related to sustainable development issues at all levels and bring to light equality issues (Engineers Without Borders, 2020; Ministry of Higher Education, Research and Innovation, 2011).

Furthermore, in our experience as teachers, students entering industry are very careful when they are looking to be hired, examining the corporate social responsibility (CSR) commitments of companies and their concrete achievements and favouring those that display sincere and effective commitments. They look for companies that are closely aligned with their values, are agile and evolve quickly. They also pay attention to ecological issues but in this context it is working conditions and well-being that are becoming increasingly important. It is here that questions of equal opportunity and gender must be addressed. Upon entering industry, graduates have a heightened awareness regarding acceptance of initial salary offers and respect for the principles of equality but may also question managerial practices.

Management Training: Developing Relevant Skills

In this context, the question arises of introducing subjects aimed at developing responsibility, including those related to equal opportunities and gender into activities engaged in throughout the three years of schooling and to integrate them coherently and transparently into the curriculum.

The engineering programme at ECM is designed to run over three years, that is, six semesters (hereinafter referred to as S5 to S10 as students are admitted to ECM after two years or four semesters of study at a CPGE). The school offers a generalist engineering degree programme in initial training. Since the beginning of the school year in September 2017, a major reform of the programmes has been undertaken, and the learning cycles have been transformed in order to develop active methods of teaching, and to introduce learning situations to enable the development of key skills required in the *Centralien* reference system.

Within this framework, specific weeks (e.g. one week at about a four- or five-week interval) have been created to raise awareness, projects have been developed and individual or team support activities undertaken to complement and reinforce academic teaching. These represent more than 40% of the training activities and are designed to take place between S5 and S9 and involve the entire student body (i.e. 300 students per class). The objective is to develop both the appropriate professional knowledge corresponding to the *Centralien* profile, in terms of both know-how and interpersonal skills and the use of a reflective approach.

The skills that engineers develop are thus based on

- methodology of action, scientific methods;
- teamwork;
- creativity and innovation; and
- communication and leadership.

On the basis of a demanding scientific foundation, the aim is to promote a commitment to professional action, and for students to develop managerial skills and attitudes, to be efficient, and to aim for autonomy in learning and decision-making. We thus propose a system that encourages a commitment to professional action, based on

- *Training actions derived from work situations*: These actions consist of a series of so-called 'opening' sequences, both scientific and cultural or societal. Combining thematic choices and varied pedagogical methods, sometimes developing conceptual aspects and sometimes experimental methods, thereby enabling each student to test his or her skills and to prepare for the academic part of the curriculum.
- *Training activities designed in work situations*: These activities consist of long projects proposed with real, complex subjects, involving several themes. The students are also involved in civil society activities with varying scope, ranging from running a club to organising major events, allowing them to test their organisational, management and leadership skills in real life.
- *Training activities through role-playing*: active learning workshops, through role-playing and behavioural analysis, enable the development of themes such as behavioural agility, team effectiveness and change management.

This holistic approach is enhanced by a comprehensive support and reflexive system, during which each student is encouraged to reflect on his or her experience and choices in order to become an actor in his or her training.

This approach to curriculum reform, through its focus on active learning and development of professional skills, opens up opportunities for dealing with social and gender issues in different ways. Respect for diversity in human relationships, teamwork and team management is a central aspect in all training activities. This reform also supports a more critical, active reflection on broader ethical issues related to engineering and the professional choices to be made in the future by each student, including reflection on the impact on the environment as well as on gender and other social inequalities.

Introduce the Notions of Gender Equality in Various Settings in a Coherent and Systematic Way

Engineering education is therefore conceived as a complex system in which each student will find a path to his or her personal development. We must think about

this system as a whole if we want to support behavioural changes and raise awareness leading to action. We are therefore careful to include different types of subjects for individual development and in various forms.

Knowledge is fundamental. Topics including understanding the construction of gender and stereotypes are addressed in the social and human sciences courses within the ECM curricula. In these courses, prejudices linked to gender and the traditional view of engineering as a masculine profession are challenged. This prepares students to face the realities of a professional world that is overwhelmingly masculine, including raising awareness of the glass ceiling that impacts women's access to positions of responsibility. It is also important to recognise the different categories of sexist acts and be aware of the legislative frameworks in order to have knowledge of the relevant sanctions in place in the private sector.

It is equally important to address these topics through responsible actions: in the context of associations and in the professional context (internships and projects or group work, managerial workshops). All of these subjects must be approached gradually.

The first year is focused on community integration and discovery. Here we focus on raising gender awareness among students.

The second year deals with responsibility, both in civil society associations by preparing to welcome newcomers, by working on the various social actions of the school's Social Lab (where students do more than 15,000 hours of volunteer work per year) but also in the corporate world by doing internships at the assistant engineer level.

In this context, we ensure a robust dissemination of knowledge, which heightens the awareness of the first year, and acts as a call to action as a future professional by focusing on student life within the school. Gender equality issues are dealt with in different ways. Team appointments encourage parity, association work trains the students to share responsibilities, internships provide an opportunity to assess and incorporate gender relations, the managerial courses deal with the diversity of behaviours. All association teams are made aware of the issues of sexism and sexual abuse, the teams are trained and a system of sanctions is put in place.

Finally, the last year is the one that prepares the students for their future profession. Here we rely on the use of observations in the workplace as part of the internships to generate awareness and to equip students with the means to act and react accordingly.

Sexual Harassment Prevention System in ECM: 'L'AnTenne'

ECM in its capacity as a HEI, welcomes more than 1,100 students of all nationalities each year who represent great social and geographical diversity. Due to an internal reflection, initiated and carried out by students and focusing on the organisation and management of a preventative space dedicated to the health and well-being of students, ECM proposed implementing an effective and accessible

alert, detection and prevention system to best accompany students in their social and academic endeavours.

The situations covered include, but are not limited to, the following:

- feeling ill, pain or discomfort, feeling a lack of self-worth, depression;
- academic failure, truancy, social withdrawal, academic or relationship difficulties; and
- hostile attitude, disruptive behaviour, violent or dependent behaviour, sexual violence, harassment, etc.

Prior to this reflection, a space dedicated to student health questions was created in response to requests for online student healthcare services. After a few years of passive operation, students expressed a desire to see it evolve into a dynamic system, coordinating all subjects and preventive actions, to create a real reception point within the school where students could go for help in cases of difficulties and could expect a coherent and coordinated response.

The identified needs were:

- intimate, user-friendly, revamped, managed space presenting clear and useful information for addressing health-related problems;
- listening and psychological follow-up system;
- on-call services with a social worker;
- a project manager responsible for monitoring education;
- creation of an identified prevention group composed of administrative staff, teachers, and students, offering role-playing, listening first and orientation for a professional psychological follow-up in case of aggression, academic failure, family difficulties, addiction, etc.;
- emergency system;
- information and communication;
- information and risk awareness;
- support and guidance;
- up-to-date information with on-site consultation available in several languages;
- actions for prevention and risk awareness actions, from training to detection, listening, support and guidance, notably through implementation;
- updated and consolidated training for the members of the prevention group; and
- awareness raising actions on topics, issues and challenges in society with a view to promoting integration and health for all (destigmatisation of disabilities, information on addictions).

These needs have led the school to create the '*AnTenne*' (antenna), which is a system linking risk awareness and detection with listening and student support services. It facilitates the prevention of issues related to physical and psychological student health and safety, which is a top priority for the school.

The heads of the associations, as well a selected student representative, participate fully in this programme and are committed to its mission of prevention, listening and support.

Conclusions

In this chapter, we have presented the approach adopted at ECM, which is intended and designed as a system. It is a system that is certainly complex, but one which is intended to be comprehensive and not an 'add on' that effectively marginalises gender equality. Our approach to integrating the gender dimension into engineering curricular and tackling gender inequalities is the result of a process in which teachers, staff and of course the students themselves are involved in a reflective process, notably through the various bodies of the institution. A comprehensive curriculum, including scientific and human disciplines, a focus on active learning and development of professional skills through different activities (work-related projects, internships, etc.), prevention of sexual harassment and commitment to ethics and sustainable development, and including social sustainability are the main pillars that have enabled us to incorporate a gender dimension. The era we are currently living in, with its huge environmental challenges, is a real opportunity for these changes because young people are particularly aware of them and are conscious that these changes cannot take place without them becoming the actors in these transformations.

Acknowledgments

Acknowledgements are expressed to all participants and stakeholders of the RMEI community of practice and in particular to its leader Anastasia Zabaniotou for her constant involvement throughout the last four years.

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Chapter 9

Structural Change Towards Gender Equality: Learning from Bottom-up and Top-down Experiences of GEP Implementation in Universities

Maria Caprile, Mina Bettachy, Daša Duhaček, Milica Mirazić, Rachel Palmén, and Angelina Kussy

Abstract

Universities are large, complex and highly hierarchical organisations with deeply engrained gendered values, norms and practices. This chapter reflects on the experiences of two universities in initiating structural change towards gender equality as supported by the TARGET project. A common aspect thereby is the lack of a national policy in higher education and research providing specific support for implementing gender equality policies. The process of audit, design, implementation, monitoring and evaluation of the first gender equality plan (GEP) in each of these universities was conceived as a first step in a long journey, providing a framework for engaging different institutional actors and fostering reflexive, evidence-based policy making. The analysis deals with reflexivity and resistance and seeks to draw lessons from bottom-up and top-down experiences of GEP implementation. It is the result of shared reflection between the GEP 'implementers' in the two universities and the team who provided support and acted as 'critical friends'.

Keywords: University; gender equality plan; top-down; bottom-up; community of practice; reflexivity

Overcoming the Challenge of Structural Change in Research Organisations: A Reflexive Approach to Gender Equality, 161–179

doi:10.1108/978-1-80262-119-820221010

Introduction

In this chapter, we look at the experiences of initiating structural change towards gender equality in two universities, the University of Belgrade (UB) in Serbia and the University Hassan II Casablanca (UH2C) in Morocco. Both are large, public universities, which play a leading role in education and research in their respective countries, covering all study fields and catering to more than 100,000 students in their Bachelor, Master and PhD programmes. Within the framework of TARGET, they were supported by NOTUS in the audit, design, implementation and monitoring of their first gender equality plans (GEP) with the objective of establishing the basis for a reflexive, evidence-based and long-term process of structural change. Building on this common approach, differences in the national and institutional contexts as well as opportunities and constraints encountered during the process paved the way for distinct top-down and bottom-up experiences of GEP implementation.

We would like to start by pointing out an apparent dissonance:

> Despite many initiatives aimed at changing organizations into gender-balanced or gender-equitable workplaces, change is slow at best. Only from a historical perspective, when one looks back a few decades, does it become clear that changes toward equality have indeed occurred, at various levels (welfare states, organizations, and the attitudes of people). (Benschop & Verloo, 2011, p. 1)

In our view, this historical approach is much needed for assessing change in universities and, most importantly, for initiating a process that needs to combine both short-term and long-term goals. While it is widely acknowledged that gender inequalities persist and change is slow (EC, 2020; UNESCO-IESALC, 2021), we think it is important to adopt a broader perspective to value and frame the achievement of 'small wins' as the starting point for further action.

There is extensive evidence that legal frameworks, policies and initiatives adopted by governmental bodies, funding agencies and other organisations are instrumental for top management acceptance to tackle gender inequalities in universities. A supportive governance framework is considered the most important structural factor for initiating sustainable change because it can produce legally binding measures, positive incentives and also sanctions (EIGE, 2016; Palmén & Kalpazidou Schmidt, 2019; Zippel, Ferree, & Zimmermann, 2016). However, even in this favourable context, a top-down GEP implementation driven mainly by external pressure clearly risks being conceived as a formal requisite with no real impact. Without gender awareness and active commitment from leadership, a GEP lacks strategic importance and implementation may be circumvented – common problems include resistance at different levels and from different actors in the university, inadequate financial and human resources, lack of gender competence, absence of adequate data and lack of authority on the part of the staff responsible for its implementation (Bleijenbergh & Van Engen, 2015; EC, 2012; EIGE, 2016; Graham, Belliveau, & Hotchkiss, 2016; McClelland & Holland,

2014; Vinkenburg, 2017). Top management commitment is even more important in countries where the context is less favourable and universities lack external support, as is the case in Serbia and Morocco.

However, the success of GEP implementation requires not only commitment from top management but also the support and involvement of other stakeholders across the whole organisation early in the process – including human resources staff, middle management and teaching and research staff (EIGE, 2016; Lansu, Bleijenbergh, & Benschop, 2019; Palmén & Kalpazidou Schmidt, 2019). This assumption lie at the core of the TARGET approach, which highlights the fact that universities follow a dual logic: while the 'scientific' logic, which characterises teaching and research, is the dominant one, universities are also organisations and therefore follow specific 'institutional' logics (Heintz, 2018). Stakeholders representing both logics have to be involved because gender and power dynamics work differently in each case. It is also important to stress that structural change in universities is complex because they are large institutions where both scientific and institutional logics are characterised by highly hierarchical formal and informal power relations (O'Connor, 2021). Research has found that less resistance to gender change is encountered in institutions where the power relations are more equal, and vice-versa (Mergaert & Lombardo, 2014).

Some studies on structural change in universities adopt a long-term perspective to highlight the role played by women and science networks, feminist movements and gender scholars to raise gender awareness, build gender competence and counteract gender bias by different means. Barry, Berg and Chandler (2011) point out that gender equality activities in Swedish higher education are influenced by the vitality of feminist movements, including institutionalised centres for gender studies, engaged in long-standing direct and indirect forms of contestation towards the status quo. The comparative study of six Nordic universities by Nielsen (2016) shows that this feature plays a pivotal role in explaining why some universities achieve a high degree of local commitment towards GEP implementation yet others do not. This can be seen, for example, at the Universities of Lund and Uppsala, where active bottom-up networks of female researchers have been contributing to sustaining the relevance and visibility of gender equality for decades. In the case of Germany, Roloff (2007) indicates that Dortmund University's success in implementing a top-down gender equality strategy was related to the presence of women in representative bodies and at different levels of the university, which in turn is a product of the feminist movement in the 1960s and 1970s. In Italy, in contrast, despite the fact that a central committee at the national level (CUG, Joint Committee for Equal Opportunity) establishes mandatory aspects through laws and sanctions, some universities are changing only slowly due to a lack of skills and experience to apply this mandate, signalling the importance of bottom-up initiatives to build gender competence in institutions (Bencivenga, 2019).

An important insight from research on the implementation of gender equality work is the need to adopt a more complex and process-oriented analysis to better understand why and when top-down or bottom-up initiatives become more important. When a process of structural change is initiated, there may be a high level of conflict and ambiguity in terms of framing the problem and the solutions. In such

situations, implementation requires both top-down and bottom-up approaches, and the strength of bottom-up coalitions and support will be important (Callerstig, 2014). The National Science Foundation's ADVANCE programme in the United States and the EU-funded structural change projects have been catalysts for supporting initiatives led by change agents (gender scholars and practitioners), paving the way for building a strong set of alliances, strengthening top management commitment and increasing the support and involvement of researchers and staff. In this vein, Cacace et al. (2015) demonstrate that actions which bridged bottom-up and top-down approaches were of significant impact in the STAGES project, while the comparative study by Palmén and Kalpazidou Schmidt (2019) reveals the potential for a twin-track approach in which bottom-up and top-down approaches are combined.

However, literature also acknowledges that bottom-up initiatives are time-consuming and can even come at the cost of reproducing gender inequalities. In a study of gender equality initiatives in different institutions and countries, Palmén and Kalpazidou Schmidt (2019) show that the willingness, interest and ability (due to time restraints and other responsibilities) of staff members, particularly researchers, to participate is considered in many cases a decisive factor. Yet they also stress that involvement from researchers (often disproportionately female) can be extremely time consuming – detracting from research activities, while being neither recognised nor rewarded as a merit. This problem is also highlighted by Caffrey et al. (2016) in a critical review of the Athena SWAN implementation in five university departments. They found that while the programme was effective for creating social space to address gender inequality and highlight problematic practices, it also reproduced gender inequalities in its enactment because female staff undertook disproportionate amounts of the implementation work. In the same vein, Bencivenga (2019) captures how the workload of undertaking gender equality work has no positive impact on women's careers and feels like a problem. In a review of EU-funded structural change projects, Ferguson (2021) refers to the need to broaden and transform academic culture, highlighting that gender equality work is academic care work and should be visualised, valued, acknowledged and rewarded – and that change agents need support in terms of time, resources and recognition within their academic careers.

This chapter is based on a shared reflection between NOTUS and the teams that led GEP implementation at UB and UH2C. It seeks to analyse the different top-down and bottom-up experiences of GEP implementation and identify some lessons learned. While no literature on such structural change in Serbia and Morocco is as yet available, the chapter builds on the insights gained in this process, the audit, interim evaluation and final monitoring reports produced within the TARGET project (TARGET, 2018, 2020, 2021) as well as seven interviews conducted by NOTUS. The selected interviewees were all representative of the main actors involved in gender equality issues and GEP implementation in both universities.

National Contexts

Gender equality approaches in Serbia and Morocco are shaped by different historical legacies, cultural traditions and political and socioeconomic conditions.

The United Nations Gender Inequality Index provides a rough insight into existing differences in the gender equality status quo: while Serbia is ranked among the upper countries (35th), Morocco ranks very low, even in comparison with other countries in the same region (121st)[1].

In Serbia, the socialist heritage left a sound basis for gender equality. The Constitution of 2006 guarantees the equality of women and men and obliges the State to develop an equal opportunities policy. Since then, important laws have been issued, namely the Law on the Prohibition of Discrimination, the Law on Equality Between the Sexes and the Law on the Protector of Citizens. The Budget System Law passed in December 2015 also envisions gender responsive budgeting at all levels. With regard to gender violence, the Criminal Code and the Law on Preventing Domestic Violence were adopted in June 2017 and urgent protective measures introduced. The new Law on Gender Equality that was withdrawn after the first draft in 2015 was finally adopted in April 2021 together with the Strategy for Preventing and Combatting Gender-based Violence Against Women and Domestic Violence for the period from 2021–2025.[2] Concerning higher education and research, Serbia published its Strategy on Scientific and Technological Development of the Republic of Serbia for the period 2016-2020 – Research for Innovation in 2016. While not fully aligned with the European Research Area priorities, the document does cover topics related to some of the priority areas and includes a gender-equality-related goal:

> Gender and minority equality will be improved at all levels of decision-making and gender budgeting will be implemented in accordance with the Gender Budgeting Guidelines at the national level in the Republic of Serbia.

However, there are no measures in place to enforce these aims, and universities are not required to implement a GEP.

Overall, Serbia has a comprehensive policy framework for gender equality, and evident progress has been made in recent years. However, there is a tendency to emphasise these achievements, while problems related to the implementation of existing laws and measures remain in the shadows – along with the impact of economic and social deprivation on gender inequalities, which mainly impact the most socially vulnerable groups, including Roma and rural women. Furthermore, the national discourse on gender equality tends to focus on 'numbers', stressing the high presence of women in government positions and other areas in comparison to other European countries. The delay in adopting the new Law on Gender Equality (from 2015 to 2021) shows the extent of the difficulties in further advancing the gender equality agenda. Serbia is facing the emergence of nationalist and

[1]The data refer to 2019 and are available at: http://hdr.undp.org/en/content/gender-inequality-index-gii. Accessed on 17 November 11 2021.

[2]@open@p>https://www.srbija.gov.rs/vest/en/171564/government-adopts-bill-on-gender-equality.php. Accessed on 17 November 2021.

far-right movements, which treat gender equality policies as an external imposition by foreign powers – overlooking the fact that both gender equality policies and feminist movements were strong in socialist times. Furthermore, Serbian society is experiencing a certain 're-traditionalisation' in terms of gender values and attitudes. Some research shows that only 23% of citizens think that women should be involved in politics and 53% think that small children suffer if a mother works (IPSOS, 2014). Paradoxically, the relatively high presence of women in academia hinders the adoption of more ambitious gender equality policies in a context where the persistence of gendered inequalities tends to be contested and the political discourse emphasises women's representation (Ćeriman, Fiket, & Rácz, 2018). Gender studies centres linked to feminist movements have played a relevant role in contesting this status quo.

Morocco has made great advancements in establishing the legal foundations for equality between women and men, namely since the adoption of affirmative positive measures for the legislative elections of 2002 (Bettachy et al., 2019). Article 19 of the new Constitution of 2011 enshrines for the first time the principle of equality between men and women in the protection of all human rights. It provides that the State shall endeavour to achieve equality between men and women and sets up a body to promote equality and fight against all forms of discrimination. The Constitution consolidates the achievements of previous legislative reforms that have contributed to greater equality between men and women and to eliminating discrimination against women. These include the revision of the Commercial Code in 1995, the adoption of the new Law on Civil Status in 2002, the new Code of Criminal Procedure in 2003, the continuing reform of the Penal Code since 2003, the changes in the Labour Code in 2003, the reform of the Family Code in 2004 and the reform of the Nationality Code in 2007. The adoption of Law 103-13 to fight against violence against women in 2016 is another step in this process.

In the field of education, the main priority has been ensuring the right to equal access, especially in poor rural areas where girls are at a great disadvantage when it comes to compulsory schooling. Several measures have been adopted under the framework of the National Education and Training Charter and the Urgence Plan (2009–2012) (Kingdom of Morocco, 2008), the Governmental Plan for Equality 2012–2016 (Kingdom of Morocco, 2012); the Strategic Plan 2015–2030 drawn up by the Higher Education Council (Kingdom of Morocco, 2015) and the new Plan for Equality 2017–2021 (Kingdom of Morocco, 2018). They include establishing the school as a safe space for learning values and behaviours related to gender equality, fostering the promotion of women to management positions and building the institutional capacity to adopt gender equality as a principle of governance throughout the education system – addressing, among other aspects, curricula and teaching approaches, budget and management (Elammari, 2018). However, all these measures refer only to compulsory education; gender equality is completely absent in the objectives set for higher education – even if there is clear evidence of severe underrepresentation of women in the highest academic and decision-making positions (Bettachy et al., 2019; Nafaa & Bettachy, 2014).

In spite of legal developments and measures adopted to strengthen women's political, economic and social rights, the patriarchal culture is firmly rooted and dire gender inequalities persist in society, both in the public and the private spheres. Furthermore, among feminist, human's rights and democratic movements, there is also the perception that the pace of legal and policy change is slowing due to strong opposition from conservative sectors. This is why struggles around gender equality are currently of high importance both in politics and society in general – and this also concerns universities, where women's networks and trade unions have been the main advocates of gender equality for a long time.

Institutional Contexts

While there are large differences in their national contexts, UB and UH2C share some institutional features. They are both large organisations with several faculties and institutes and a complex governance framework. UB consists of 31 faculties, 11 institutes and one library, and all these institutions represent separate legal entities according to the university's statute. This is particularly important since it accords (financial, above all other) autonomy to the faculties and institutes. The university does not have the mandate over the business matters of the faculties or institutes, which also limits the influence of its governing bodies in all decision-making processes. Decisions are often made through a complex procedure of negotiations. UH2C consists of 17 faculties located in 2 different cities, with 123 laboratories, 10 centres for doctoral studies, 10 research centres, 4 research poles, 2 research platforms and 1 observatory. In contrast to UB, these institutions are not separate legal entities. However, UH2C is the result of a 2014 merger of two different universities, a fact that has entailed great efforts to align institutional agendas and develop new governance and management systems and structures.

In terms of women's presence,[3] the audit developed within the TARGET project showed that women make up a majority of the student population in both universities at Bachelor and Master level. At UB, this trend is also maintained at PhD level, while the share of women among PhD students decreases to 40% at UH2C. In contrast, gender segregation by study field is less marked at UH2C than at UB, where technology and engineering remain male-dominated disciplines, while other fields – such as education or philology – are female dominated. Differences between the two universities are more salient when it comes to teaching and research staff and decision-making bodies, with gender imbalances far more pronounced at UH2C than at UB. At UH2C, women are under-represented among research and teaching staff (35%) and in particular among full professors (27%). At the level of decision-making bodies, the under-representation of women is even more acute. In 2018, there was no presence of women in the presidency (president, vice-president and general secretary) and only 1 of the 17 deans were women. Women accounted for 16% of the members of the university council

[3]Audit data about students and research and teaching staff refer to the academic year 2016–2017.

and their share was below 20% in the academic and research commissions. Severe under-representation of women was also found in recruitment commissions at faculty level. At UB, the status quo is significantly more positive. Overall, there is gender balance among research and teaching staff, and the share of women among full professors lies at 40%. In 2018, the rector collegium was fairly balanced (one male rector, two male vice-rectors and two female vice-rectors), and the share of women in the UB council and senate was around 30%. When it comes to the committees for academic promotion, sharp differences between faculties emerge either in favour of men or of women, although the overall share of women is 37%. Inequalities are, however, more pronounced among faculty deans, who have strong management power since each faculty is a separate legal entity. Only 6 out of 31 deans in 2018 were women, and this trend has remained stable over the last decade.

In both universities, the gender dimension in curricula is an issue that is completely absent in their strategies to strengthen the excellence of education and research. The establishment of centres of gender studies and research groups, as well as the accreditation of gender courses, has been driven by gender scholars and remains rather fragmented. At UB, the Centre for Gender and Politics was established in 2006 as part of the Faculty of Political Sciences. It was the first of its kind at the university and has played a pivotal role in producing and sharing knowledge on gender issues in both Serbia and the wider region. The Institute for Philosophy and Social Theory is also actively engaged in gender-related research. On the course level, UB in 2018 had one comprehensive Master of Gender Studies programme offered at the Faculty of Political Sciences, and some gender-related courses were present in the curricula of five faculties at all levels (Bachelor, Master and PhD), mainly as elective courses. Compulsory courses feature on the curriculum in the fields of ethnology and anthropology (Bachelor and Master), political sciences (Bachelor) and medicine (Bachelor). UH2C, in turn, is one of the three universities in Morocco with accredited gender research groups (Faculties of Arts, Humanities, Law, Economics and Social Sciences). There are two gender-related Master programmes and two PhD programmes but no gender courses at Bachelor level.

It is also relevant to stress that the UB Centre for Gender and Politics has been actively involved in advancing gender equality within the Faculty of Political Sciences, addressing issues related with recruitment and promotion procedures, working conditions and sexual harassment. One of the interviewees, the dean of this faculty from 2008 to 2015, stated that beyond new rules and measures, the Centre 'made the atmosphere of the faculty more sensitive to gender issues', fostering actual change in values and attitudes. In contrast, the priority at UH2C was placed on strengthening research structures and courses, with the university also playing a very active role at the national level. In 2015, the UH2C gender research groups organised Morocco's first National Congress on Gender in Higher Education (General States of Research and Education on Gender) in collaboration with UNESCO. The congress issued a Joint Statement to foster gender in research and curricula, which was signed by the president of UH2C and several deans (Gillot & Nadifi, 2018). Women's networks have, however, been more active players when it comes to gender inequalities in careers and decision-making.

From Audit to GEP: Top-down and Bottom-up Approaches

The initial stage of TARGET was a catalyst to build institutional commitment towards gender equality through the audit, design and approval process of the first GEP in both universities. Here, the national and institutional contexts as well as differences between the teams leading the processes paved the way for distinct top-down and bottom-up approaches.

At UB, the initial preparatory phase consisted of forming a small community of practice (CoP) that would serve as an immediate support group for the audit. Besides the TARGET team, consisting of a vice-rector (who was subsequently promoted to rector during the TARGET project), a professor of gender studies and co-founder of the Centre for Gender and Politics as well as a gender research assistant, who would later become UB's gender programme officer, this group consisted of individuals employed in the different university bodies identified as essential in the data collection process, namely employees at the UB computing centre and administrative officers in the rectorate. Together with the top-level management (rector, vice-rectors and the heads of the different sectors at the university), this group was informed about the TARGET project's main aims and goals as well as the upcoming gender audit that would require their support and help in gathering data. This small CoP proved to be very effective, and a comprehensive audit was carried out at the beginning of 2018, collecting for the first time sex-disaggregated data at all levels, including all decision-making bodies, as well as an initial sketch of the status quo concerning gender in curricula. The results were discussed in a workshop attended by around 30 people, including the top management of faculties and professors involved in gender issues.

The audit served as the basis for identifying priority areas of action to go into the design of the GEP. This process was shaped by the appointment of the TARGET team coordinator (a former vice-rector) to rector of the university, only the second woman ever to head UB. Having full support and commitment from top management, the GEP was designed strategically as a 'low profile' plan, avoiding sensitive issues which might raise strong resistance (such as sexual harassment or gender-sensitive language). The main aim was to build consensus and anchor gender equality in the agenda of the university. In this vein, the GEP was mainly focused on activities that were deemed to be a priority for sustaining gender equality policies in the future and that could be carried out with the resources available in the rectorate. In addition to raising gender awareness, especially related to the representation of women in top management and decision-making bodies and structures, the GEP focused on two main objectives: creating a permanent gender equality officer at the university level and establishing systematic procedures and information systems to improve data collection and address data gaps, including gender in curricula. The GEP was signed by the rector in September 2018 and adopted by the senate in April 2019.

In contrast to this top-down strategy, the process at UH2C adopted a participatory and bottom-up character from the outset. A large TARGET team was set up and led by a physics professor, who was also president of the Women's and Science Association in Morocco, one of the most active women's networks in the field.

The team was composed of around 10 professors from different faculties and disciplines, all with a background of activism in women's rights and careers within the university. In parallel, contacts were made to involve representatives at the top of the university's hierarchy in the CoP, including the president, vice-presidents, deans, and vice-deans as well as directors and heads of laboratories and departments, in an attempt to involve different institutions and disciplines, including gender scholars. While some saw their involvement more as an administrative obligation in one of the university's projects, others showed great commitment and enthusiasm to engage in action.

The involvement of this CoP (steering committee) of around 20 people in different management positions was made highly visible through two institutional workshops organised in the first stage of the process, which attracted around 60–70 participants and about which corresponding information and materials were later widely disseminated. The first workshop discussed the outcomes of the gender audit (February 2018) and the second the design of gender equality policies (June 2018). The result of this process was a proposal to adopt an Equality Charter and an Action Plan. After long negotiations with the presidency, and thanks to the active support of several members of the university council, the Charter was included in UH2C's agenda and was finally adopted unanimously at the meeting of the council held in December 2018. This Charter formulates the general commitment on the part of UH2C to develop a culture of gender equality, fight all forms of discrimination and violence, and increase women's participation in decision-making. All authorities, institutions and stakeholders at the university have been invited to adhere to the Charter and implement a set of measures, including the adoption of a quota. Although the Charter itself was not binding, the official acknowledgement of gender inequalities and the call to action had a strong impact within the university. The Action Plan builds on the Charter and contains more specific activities to be carried out by the TARGET team, with a focus on raising awareness, fostering women's access to decision-making and improving the collection of sex-disaggregated data.

GEP Implementation: Interplay Between Top-down and Bottom-up Approaches

The initial process of GEP design depicted quite a different picture in the two universities. A top-down strategy of GEP implementation at UB, with very clear, albeit limited objectives, versus a more ambitious bottom-up approach at UH2C, albeit marked by the vagueness of the actions to be taken. Yet in both cases, the actual implementation of the GEP blurred these differences to some extent. In this process, a more complex interplay between top-down and bottom-up approaches emerged, partly driven by unexpected opportunities and constraints which required flexibility and adaptation in the formulation of objectives and actions.

UB: From Low- to High-Profile GEP

The UB CoP proved to be very effective in addressing most of the data gaps identified in the audit. While sex-disaggregated data were already collected for

students and research staff, there was no data available for decision-making bodies. Regular and systematic collection of this data was considered essential to the successful planning, implementation and monitoring of any future measure to improve women's access to decision-making. Since the adoption of the GEP, data have been regularly updated every academic year – albeit with great effort on the part of the TARGET team as most faculties do not collect this data and only provide the names of people in decision-making positions. Since the faculties are separate legal entities, the rectorate cannot require them to devote more resources to this task. In a similar vein, the TARGET team strove to establish a database of all accredited gender-related courses and their characteristics for the first time, which was then regularly updated. Having comprehensive data on courses that focus on gender studies and gender equality was seen as an important step towards adopting more ambitious measures to foster gender mainstreaming in curricula in the future.

More difficulties were encountered for collecting sex-disaggregated data on careers. The audit indicated that there were gaps between men and women when it comes to career paths and academic promotions, suggesting that one of the priorities of future action should be to reassess the criteria and procedures for recruitment, evaluation and promotion from a gender perspective. Accordingly, one of the objectives of the GEP was to establish a system for monitoring trends in career paths, including different complex factors that might be contributing to inequality. It was foreseen that the UB computing centre would establish a system to automatically collect data from the faculties on the age of promotion of teaching staff. However, it did not prove possible to implement this system due to systematic data collection issues as well as serious shortage of IT staff. As an alternative, the TARGET team established a good cooperation with the Institute for Philosophy and Social Theory (one of the institutes at UB that is very active in gender research) and the Centre for Ethics, Law and Applied Philosophy (CELAP), who were conducting a qualitative gender analysis of career paths among young academics, which seemed useful for setting clearer future goals in this area.

Data collection was combined with intensive dissemination of results and awareness-raising activities throughout the entire GEP implementation process. The rector and the gender programme officer were especially active in this field, taking advantage of any university events, meetings with policy makers and presence in the media. Furthermore, the team presented the work done at several high-profile academic conferences. Awareness raising also included the development of new materials. The team conducted research on the history of UB, focusing on women who were the first to achieve outstanding results or positions within the university. As a result, a printed calendar was published to increase the visibility of women in academia and raise awareness of the importance of gender equality. In a similar vein, a brochure was prepared to support the dissemination of all gender-related courses offered by UB, and a scientific article on this topic was published (Duhaček & Miražić, 2021).

The main constraint in GEP implementation was the lack of consensus for establishing a permanent gender equality position at the university level, partially

related to the fact that the rectorate was not able to ensure financial resources for this post. The alternative was to create a gender equality committee as a permanent and advisory body with the mandate to monitor gender equality and develop policies and tools. This committee was officially established by the rector in May 2019, with the 12 appointed members carefully selected to ensure a balanced representation of all important university stakeholders – the four faculty groups, institutes, teaching and non-teaching staff, and students. Although the first constitutional meeting was not actually held until the beginning of 2021, several members were actively engaged in GEP activities.

The relatively smooth implementation of the GEP was disrupted in 2021, when some cases of sexual harassment were reported at UB, drawing media attention and mobilising students in the context of a strong wave of #metoo stories in Serbia. The situation made it clear that there was a need to take action – even if this had not been initially planned. Establishing anti-sexual harassment protocols and procedures had been a highly sensitive topic within the university for decades – it was raised by gender scholars and feminist movements but faced strong resistance. The Faculty of Political Sciences was the first to adopt a formal policy in 2014, with the Centre for Gender and Politics playing a key role in this process. It was followed in 2019 by the Faculty of Psychology. The adoption of the first anti-sexual harassment policy at the university level was clearly a process 'from the bottom to the top' (see also Miražić & Duhaček in this volume). Members of both the TARGET team and the gender equality committee were directly involved in these initiatives. The experience gained in supporting the establishment and enforcement of these policies at the faculty level was a key facilitating factor.

The 'Rulebook on the prevention of and protection from sexual harassment at the University of Belgrade' was adopted by the university's governing bodies in July 2021 and refers to all the members institution – a fact which is of great importance given the autonomy of UB institutions. The document contains the institution's full commitment to prohibiting discrimination and any form of abuse or harassment as well as definitions of the target groups: students, all university staff as well as all persons in the process of enrolling in any programme at the university. Furthermore, the university recommends continuous training for 'all the students and employees on all matters relevant to prevention of sexual harassment' and also emphasises the role of curricula and textbooks in the prevention of any kind of discrimination or harassment based on sex, gender or sexual orientation. As highlighted by Miražić and Duhaček in this volume, the most important innovation in comparison to the previously adopted faculty rulebooks is the introduction of the position of a commissioner for equality in each member institution. The main role of these commissioners would be to organise training activities with the aim of raising awareness of and preventing sexual harassment. The commissioners will also assume an important role in the procedures of protection against sexual harassment as the persons responsible for initially handling the complaint.

The adoption of this rulebook was a great achievement and had a strong impact on raising gender awareness and building commitment for adopting more

ambitious gender equality policies. With regard to the status quo, there have been no significant changes in the main areas of concern for gender equality in comparison to the initial audit. The situation has remained more or less the same concerning careers, decision-making and the content of curricula. This fact shows that previous improvements remain stable and are sustainable, regardless of the election of the new rector in October 2021.

UH2C: Institutionalisation and Alliances

The momentum gained through the adoption of the Charter of Equality of UH2C paved the way to address the institutionalisation of gender equality policies in the university, an aspect which was not initially foreseen. It was recognised that the mere adoption of the Charter was insufficient and had to be followed by setting up a commission within the university council to establish more specific objectives and monitor-related actions. The establishment of this gender equality commission was the result of intense negotiations with the presidency and members of the council. On Women's Day 2019, the university council officially agreed to set up this commission, whose status, composition and objectives were publicly discussed within the TARGET CoP in the institutional workshop held soon afterwards. The discussion highlighted the need to establish a permanent commission, similar to other commissions of the council, a fact which entailed changing the university's statute. A balanced presence of men and women was required in order to engage men in the development of gender equality policies. The commission should have a clear mandate, namely in terms of ensuring the presence of women in decision-making and recruitment boards, including the use of quota. Finally, similar commissions should be created at the faculty level.

It is telling that the commission, which was formally constituted in July 2019, followed these recommendations. It was composed of a balanced number of women and men and included members of the council and two representatives from the TARGET team. The chair was a member of the council who was also involved in the TARGET CoP. In the initial CoP meeting, all members agreed that a permanent commission would send a strong message about the relevance of gender equality for the institution – and would also acknowledge the fact that advancing gender equality should be part of a long-term and sustained approach.

The commission held several meetings until March 2020, when the outbreak of the COVID-19 pandemic disrupted the normal functioning of the university. In these meetings, the adoption of a quota was discussed at length as a tool to increase the number of women in decision-making positions at different levels, including management and academic boards as well as recruitment and promotion commissions. However, it should also be stressed that discussion about quota went well beyond 'fixing the numbers'. It opened a wider debate on gender inequalities and how they are shaped by deeply rooted cultural prejudices and stereotypes which are present not only in society but also at the university. In this sense, even if not all the members of the commission agreed on adopting a quota, the discussion was useful to develop a broader concept of gender equality and build institutional commitment for adopting a more comprehensive approach

that dealt with cultural and organisational aspects. In terms of women's presence, the consensus was set on affirmative action, giving preference to women in cases where two candidates had equal skills and qualifications.

Building evidence of gender inequalities was a pivotal factor in this process. It was also extremely difficult because there is no systematic collection of sex-disaggregated data at the university. An additional problem were the continuous changes in administrative staff, which hindered their commitment to this task. With great effort, the TARGET team was nevertheless able to collect sex-disaggregated data on students and graduates, university staff and all kinds of decision-making bodies, although it was not possible to establish a regular updating of data. This was combined with the implementation of a survey to explore gender perceptions among research and teaching staff, carried out in collaboration with one of the gender research teams at UH2C (DEGG – Law, Economics, Management and Gender) attached to the Faculty of Legal, Economic and Social Sciences Ain Choc. An interesting aspect highlighted by the survey concerns the gap between the low presence of women in positions of responsibility and their high interest in holding such positions – women show less satisfaction than men with the achievement of professional ambitions and are more aware of the existence of gender-related prejudices and barriers. This is in contrast with the prevailing discourse at UH2C, which argues that differences in career progression are mainly located outside the university, with women being less ambitious than men because of socialisation and care responsibilities. The survey also identified a significant minority of men who were aware of gender biases in the university. The outcomes of the survey were publicly presented in December 2019, highlighting the existence of either hidden or more overt discriminatory practices related to promotion, designation of committees and access to management positions. The main recommendations of the study (DEGG & TARGET, 2019) were in line with the TARGET approach: ensure the formalisation and transparency of internal procedures, facilitate access to information and adopt institutional policies to increase women's presence in decision-making bodies, including if necessary affirmative measures.

The study also underscored the need to strengthen gender in research and curricula, an aspect that had until then not been a priority in the work carried out by the TARGET team. Building on the positive collaboration with the gender research team that conducted the study, it became clear that other gender scholars should be more actively involved in the process. Contacts were initiated to align agendas, which resulted in a workshop held in April 2021 in which all the heads of the gender research teams participated. The purpose of the workshop was not only to support and disseminate the work done in this field but also to explore how to strengthen the gender dimension in curricula in the framework of the overall reform of the UH2C curricula which was then under discussion. The workshop acknowledged the importance of the Equality Charter and the need to further develop gender equality policies at all levels, including measures and resources to integrate the gender dimension into education. It highlighted the need to establish a clear and shared framework in this area, considering as a starting point the 2015 Joint Statement of the General States of Research and

Education, which was signed by the university's president and several deans. In this vein, it was recommended to create a committee of four or five professors to steer and monitor the process, develop a transversal module on gender, introduce targeted training for teachers and arrange para-university cultural activities to raise gender awareness among students and research staff.

It is worth noting that the process initiated by TARGET created a more supportive climate towards gender equality in the university – related at least partially to positive developments concerning women's presence. In 2019, a woman was elected as president of the university, only the second woman to have ever held such a position in Morocco. Positive change has also been recorded in other high-level positions (vice-president, deans, vice-deans, general secretaries and heads of departments).

In contrast, an unexpected constraint was the postponement of the constitution of the new equality commission since the renewal of the university council for the period from 2021 to 2023. In spite of this, the TARGET team was quite successful in following the agreed plan, i.e. to establish similar commissions at the faculty level. In November 2021, three commissions were operating, and another three were in the process of being formed, already with the approval of the deans. It goes without saying that this process was only possible through intense efforts: one of the interviewees noted that she was referred to as 'Ms. Gender Issues' in her faculty. It also shows how the adoption of gender equality policies has gained legitimacy among deans and other people in managerial and academic boards. Nevertheless, the constitution of this commission at the university level with a permanent status and clear mandate, is a key factor for sustaining change.

Conclusions

In both universities, TARGET has been a catalyst for building evidence of gender inequalities, raising gender awareness and institutionalising gender equality policies. The most important mechanisms for ensuring long-term, sustainable support for gender equality at the institutional level are the GEP (UB) and the Equality Charter (UH2C) alongside the gender structures which have been created: the gender equality committee at UB and the equality commission of the UH2C university council, replicated in some faculties.

The process of initiating structural change has opened a space for building evidence and reflecting more systematically on gender issues among different actors in both universities including top management, gender scholars and activists. At UB, the bridge between gender knowledge and practical expertise in developing gender equality policies has been a key facilitating factor, along with the full commitment and support from the rector. The process has been more challenging at UH2C, where there was no previous experience of gender equality policies. Strengthening both institutional commitment and collaboration with gender scholars has been a great achievement. The analysis also shows that the process has been complex and nonlinear, and that the interplay and desired complementarity between top-down and bottom-up approaches is highly dependent on contextual factors and the specific constellation of opportunities and constraints.

The commitment of university leaders to gender equality has been extremely important given the national contexts, which are characterised by a lack of discourse on gender equality in academia. However, this commitment may be fragile and changing. In both universities, a priority is to ensure a clear mandate of the gender equality structures that have been created and facilitate a regular work dynamic. In this regard, the lack of resources and the dependency on elections or top management are problematic issues.

The experiences of both universities also clearly show that actual change relies on decades of bottom-up activism by feminist movements and networks, both inside and outside the universities. Here, the bridge between gender scholarship and practitioners' expertise is of high relevance to address both institutional and academic logics. It is hoped that this gender equality academic work will be recognised and valued.

Acknowledgments

We are grateful to all the persons who were interviewed in the preparation of this chapter for their invaluable insights and remarks: Prof. Adriana Zaharijevic, Prof. Dalila Loudiy, Prof. Ilija Vujacic, Lara Končar, Prof. Rajaa Nadifi, Prof. Tamara Džamonja and Prof. Zorica Mrsevic.

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Chapter 10

Promoting Structural Change in Small Organisations: Strengths, Resistance and the Quest for Excellence

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Abstract

Research-funding organisations (RFOs) and research-performing organisations (RPOs) are in a privileged position to significantly reshape the research and innovation landscape – not only by implementing gender equality plans (GEPs) as institutions but also in terms of the relationship and potential impact of these plans on the institutional context in which they are embedded. This paper reflects on the content and methodology of the GEP implementation at two RFOs and one non-university RPOs. Grounded in the knowledge base of each organisation, the analysis provides insights and expert feedback in order to understand to what extent and under which conditions GEPs are a systematic and comprehensive policy in promoting structural change that has a high potential impact on research policy definition and funding. Reviewing the internal assessment phase, the preliminary steps in the design process as well as the implementation and monitoring phase, the analysis detects both the strengths and challenges or resistance connected to external and internal factors as well as the specific strategies that small organisations employ to promote and sustain organisational and cultural change.

Keywords: Research-funding organisations; research-performing organisations; gender equality plans; small organisations; institutional change; community of practice

Overcoming the Challenge of Structural Change in Research Organisations: A Reflexive Approach to Gender Equality, 181–198

doi:10.1108/978-1-80262-119-820221011

Introduction

In the framework of the TARGET project, Fondazione Giacomo Brodolini (FGB) is the supporting partner of two research-funding organisations (RFOs) and one research-performing organisation (RPO). The three organisations in this case study, the Research Promotion Foundation – Research and Innovation Foundation (RIF) (Cyprus), the Regional Foundation for Biomedical Research – FRRB (Italy) and the Hellenic Foundation for European and Foreign Policy – ELIAMEP (Greece), although acting in different legal, economic and social environments all have slightly different nuances of the Mediterranean culture in common (Calloni, 2019; Forest, Arnaut, & Mergaert, 2016). During the four years of the project, all three organisations worked on the definition, adoption and implementation of their gender equality plans (GEPs), which are similar in some specific aspects. The three organisations represent a heterogeneous group, with two of them aiming at initiating gender equality policies in RFOs through specific steering instruments that have a direct or indirect influence on funded organisations. All three are small in size (ranging from less than 10 to not more than 100 employees), exhibit a lower level of organisational complexity than other TARGET partners (e.g. universities) but have a strict level of connections with the highest regional or national political authorities in the field of research and science. RIF (Cyprus) is a national RFO, founded in 1996 at the initiative of the Government of the Republic of Cyprus with a view to promoting scientific and technological research in Cyprus. It is a private, non-profit legal entity that is registered as a foundation and acts as the only national agency responsible for the support and promotion of research, technological development and innovation in Cyprus. FRRB (Italy) is a regional funding body for biomedical research, a non-for-profit organisation established in October 2011 by the Lombardy Region, an entity governed by public law with the aim of promoting and supporting scientific research in Life Sciences in the Lombardy Region. ELIAMEP is an independent, non-profit and policy-oriented research and training institute based in Athens and founded in 1988. Its mission is to conduct research and training and to provide a forum for open dialogue and deliberation on topical matters in European and foreign policy.

This chapter presents the results of the three-year pathway to initiating sustainable institutional change in these organisations through the TARGET project and embedding the GEP process within the institutions. It describes the specific strategies adopted by the implementing partners so far, looking more specifically at the challenges faced in the different contexts. The analysis is based on documentary evidence: we draw on the TARGET project's documentation over three years as well as our own reflections on this process as supporting partner of the organisations. We conclude by highlighting the strategy of building consensus at multiple levels to achieve organisational transformation in small organisations as well as the need to focus on the dynamics of the involvement of different stakeholders. In addition, when taking a closer look at the policy framework for integrating gender equality into an organisation's activities, it appears also relevant to account for developments in the research-funding mechanism. As an exploratory

study seeking to identify different approaches, the analysis of the three cases is not comparative in the conventional sense. The innovative aspect of the analysis stands in its focus on GEP definition and implementation in small organisations, concentrating on their specificities and the importance of external push factors to support the implementation.

Policy Framework

Changes to gender equality in research and innovation (R&I) reflect wider societal changes but are also directly affected by a range of influences, including government legislation, regulatory frameworks, action plans and strategies as well as committed individuals (Bencivenga & Drew, 2021; Linková, Mladenić, Papp, & Saldova, 2007; Lipinsky, 2014). The role of external gender equality legal and regulatory frameworks in both fostering and shaping the contours of GEP development and implementation is however an important factor. In Italy, Cyprus and Greece, there is no GEP requirement instituted at the national level through law, policy or strategy that is compliant with the Horizon Europe requirement (see also Anagnostou in this volume). However, expertise in the field has been developed as a result of the participation of many R&I institutions in Horizon 2020 Science with and for Society (SwafS) calls (Bencivenga, Siri, Leone, & Taramasso, 2021).

In Greece, the existing legislation for promoting gender equality is based on the State Constitution of 1975 and its 2001 revision, which entails three legal provisions that concentrate on gender equality and condemn discrimination on the ground of sex. Since 1975, several important pieces of legislation have been introduced, while the country ratified several international treaties. As a result of the country's accession to the European Union (EU) in 1981, EU rules and regulations for the promotion of gender equality became part of Greek Law, leading to various types of legislative and other actions, including the modernisation of the Family Law in 1983, which brought significant changes to the position of women in society (Tsaoussis-Hatzis, 2003). The revision of the State Constitution in 2001 provided that the implementation of positive measures which promote gender equality do not constitute discriminatory acts towards sex and are necessary for the eradication of gender inequalities, thus constituting the foundation for achieving gender equality in a substantive form (Anagnostou, 2013). Gender-mainstreaming policy and action in Greece has focused on issues of employment, education, health, domestic violence, access to public administration, equity in representation and women's empowerment. These policy areas are developed in the National Action Plan on Gender Equality 2016–2020 and promoted in collaboration with representatives of civil society, academia and public administration to define concrete objectives and synergies with stakeholders (Konsta, 2018). Priority 4 of the National Action Plan for R&I within the European Research Area (ERA) strategy stresses horizontal and vertical segregation and the fact that almost no gender equality policies had been implemented as of 2015 (Ministry of Interior, 2018). The description of the status quo (reference year 2015) depicts a lack of gender equality policies in

general. Law 4604/2019 (Art. 21) refers for the first time to GEPs as key tools that can be used by public and private organisations to promote gender equality. Organisations that adopt a GEP may be rewarded with an 'Equality Badge' (*Sima Isotitas*) by the General Secretariat for Gender Equality (GSGE, Greece's main public body responsible for implementing gender equality policy).

In Cyprus, the Constitution has a section on gender equality, focusing on the equal treatment of women and prohibiting discrimination (Art. 28). In 2017, the Cyprus Directorate General for European Programmes, Coordination, and Development published the National Policy for the ERA 2016–2020 (Republic of Cyprus, 2017) with the aim of increasing awareness for gender equality throughout the country. Cyprus has adopted a legislative framework for the protection and promotion of equality in sectors such as the workplace, family relations, inheritance and property issues and has also adopted legislation for tackling violence against women and combatting racial and other discrimination. Equality action plans include policies for equal distribution of care responsibilities, harmonisation of career and family obligations, access to affordable and good quality childcare services, equal access to education, training, health and justice services, combatting all forms of gender-based violence and elimination of inequalities, discrimination and stereotypes.

In Italy, alongside the formal statement for the recognition of gender equality and non-discrimination in Article 3 of the Constitution, the National Code of Equal Opportunities between Women and Men – which was established by Legislative Decree No 198 of 2006 – is considered the Italian legal framework on gender equality and women's empowerment (Gottardi & Calafà, 2009). The Code gathers 11 laws on equal opportunities in a single text, with a view to rationalising and harmonising the current legislative provisions on gender equality and regulates the promotion of equal opportunities between women and men in the areas of ethical, social and economic relations and in civil and political rights. Italy has a legal requirement for national, regional and local public authorities and non-profit institutions (including RPOs) to adopt a triennial Positive Action Plan (PAP) aimed at removing the obstacles that hamper the full realisation of equal opportunities at work. In 2006, the Italian National Code of Equal Opportunities between Women and Men made it mandatory by law (Legislative Decree 198) for all public administrations, including the 96 state universities, to produce a PAP to remove obstacles preventing the full realisation of equality between women and men. An Italian university's PAP is prepared and implemented by an internal Unique Guarantee Committee for Equal Opportunities in Public Administrations for workers' wellbeing and against discriminations (CUG), established in 2010. In its PAP, the university outlines the positive actions planned for the following three years to promote gender equality. There is no common template for a PAP, which takes a narrative form and is similar to a GEP. Until recently, the GEP requirement did not provide any guidelines, budget, building blocks or sanctions. However, in July 2021, the Conference of Italian University Rectors (CRUI) published and disseminated guidelines (Vademecum) for the preparation and drafting of GEPs in universities (CRUI, 2021).

Approaches, Content and Methodology of Implementing GEPs in Small Organisations

RIF, ELIAMEP and FRRB were supported in the development and implementation of their GEPs by the methodologies and tools defined in the framework of the TARGET project. The TARGET approach includes the implementation of a gender equality audit, the identification of a gender agent, the constitution of a community of practice (CoP), the identification of monitoring indicators, competence-building and awareness-raising events as well as participation in transnational meetings with representatives from all project partners as occasions for mutual learning and exchange. The first key challenge was the lack of available information, data and indicators. In small organisations, the matter of collecting and sharing (sensitive) information is a crucial point: all three of the organisations faced difficulties in collecting complete data, especially about salaries, employment contracts and promotion processes. This challenge is explained by the fact that RIF, ELIAMEP and FRRB are relatively small institutions where most staff members know each other, making privacy very difficult to maintain when data is collected and disaggregated. Due to the lack of previous gender policies within the organisations and, consequently, the lack of sex-disaggregated data, the main priority of each of the organisations was to define a clear policy for the GEPs and raise awareness within the institution and beyond.

The adoption and implementation of a GEP creates space for a systematic consideration and discussion of gender and equality issues within organisations – including data collection. It also provides a framework for mutual learning among relevant stakeholders and starting a process for systematically reflecting on gender inequalities and unconscious bias as well as catalysing cultural and structural changes. The GEPs at RIF, ELIAMEP and FRRB all propose systematic data collection and several measures to tackle diverse issues in relation to gender equality, the most popular of which focus on career progression, developing gender sensitive language, briefing evaluators of research proposals on gender bias and the importance of a gender focus in research as a way to promoting excellence. In addition, the reflection in groups dedicated to the implementation of GEP activities aimed at identifying inequalities and introducing institutional solutions to address the problems; it also helped to develop a critical attitude towards whatever was presented as gender neutral in the organisation, both questioning this neutrality and/or gender blindness.

While the three organisations focused on different tools and strategies, they all used similar approaches and methodologies to build a long-term process of organisational change aimed at embedding a gender-sensitive culture throughout their internal operations as well as in the approach and content of their activities. Despite the wide differences between their stated goals, priorities and activities, some priority areas of action and significant developments can be highlighted for the three organisations.

Internal Procedures and Data Collection

The three organisations had no previous specific gender equality policies, due not least to their small numbers of staff and the limited and weak national policies in place in their respective countries to promote gender equality and encourage or require academic, R&I organisations to take measures to pursue it. Consequently, most of the internal documents did not specifically refer to gender equality, and formalised policies for counteracting gender bias and promoting gender equality when it came to recruitment or promotion were lacking. Main operative documents (internal rules of operation, ethics in research guidelines, presidential decree) often referred to meritocracy and non-discrimination but not to gender equality. As a consequence, gender issues did not emerge in their external communication strategies. At the same time, the formal endorsement of a general principle of equality and non-discrimination contained in most operating documents formed a favourable substratum of pre-existing organisational norms and values upon which to build an explicit commitment to gender equality. This led to a formal inclusion of a reference to gender-related issues in internal procedures. FRRB has analysed its internal regulations and procedures and decided to focus on its Ethics Code by introducing a statement on gender equality, while RIF has included a gender-sensitive statement in all calls for proposals issued by the Foundation as well as other related documents (e.g. Guide for Evaluators, Proposal Submission Forms). ELIAMEP has included an Equal Opportunity Principle in its internal operating rules (IRO) and Code of Ethics to ensure that an overall gender-balanced participation is achieved in the recruitment process and in top management positions and to introduce specific gender-neutral language into official documents.

Since collecting and monitoring relevant gender-related data was one of the main objectives of the GEPs, the three organisations have been building up their corresponding institutional capacity by starting a process of collecting information and statistics as well as planning and establishing systematic procedures and information systems to improve collection processes and address data gaps. As already mentioned, monitoring sex-disaggregated data at all levels has proven to be demanding, and the three organisations are still working on their procedures for the regular collection of data to monitor trends. Progress can, however, be reported concerning sex-disaggregated data related to funding activities. RIF has collected data for the period 2017–2020 regarding the female coordinators of submitted proposals and funded projects and expects this process to be facilitated by the establishment of a new information system within the institution. FRRB has created a database to include the data of applicants and grant awardees disaggregated by sex. The database, which collects the results of all projects disaggregated by sex, will support the analysis of gender gaps in research funding and aid the planning of tailored actions to promote gender equal participation. ELIAMEP has started monitoring the number of projects and proposals that incorporate a gender dimension. In particular, it has produced a new project information template which all researchers will have to complete for each project they implement. The information that they now need to provide includes whether one of the main

focus of their projects is gender or whether it includes the gender dimension in research content. Over the next year, ELIAMEP will thus be able to gather data on this aspect, as regular and systematic collection of data is seen overall as relevant for the long-term sustainability of its GEP.

The TARGET project's reflexive approach has supported all three organisations in the process of deciding (1) which kind of sex-disaggregated data should be collected as a priority and (2) how this should be permanently integrated into data collection systems. The gender teams and CoPs in the organisations had the opportunity to share their views on how deeply the absence of sex-disaggregated data might influence strategic decisions and daily choices. The implementation of the gender audit has been not only a preliminary step for the development of the GEPs but also an interesting reflexive exercise on the importance of sex-disaggregated data collection to overcome a gender-blind description of the organisation.

Competence-Building, Awareness-Raising and Funding

Competence-building and awareness-raising activities (training and workshops) have addressed the importance of the gender dimension, both in the composition of staff, decision-making bodies and research teams as well as in the content of training and research activities. As emerged in the monitoring reports, and before the TARGET project, gender issues were not considered as a priority within the three organisations – due to a lack of knowledge, expertise and resources or an unconscious gender bias at various levels. As a consequence, awareness-raising activities were considered a crucial measure to influence decision-making and promote gender-related issues. Specific training events or meetings were planned to increase awareness, link gender equality to scientific excellence and act as a reminder that the gender perspective is an awarding criterion in European and international projects. At FRRB, specific training tailored to the needs and structure of the organisation helped fill the knowledge gaps in terms of gender equality policies and provided an insight into the gender impact of different policies and political initiatives. In addition, the exceptional situation in Italy (and Lombardy in particular) since the outbreak of the COVID-19 pandemic led FRRB to organise a roundtable on the scientific, social and political aspects of this health emergency from a gender equality point of view. At ELIAMEP, the integration of the gender dimension into research content was implemented mainly through the organisation of workshops for young researchers in the organisation and other research centres and universities. RIF also organised an information session for staff on the implementation of a sexual harassment policy. Funding activities were also implemented to promote the integration of the gender dimension into research content. These activities mainly addressed gender-related issues in calls for proposals and aimed at increasing gender equality awareness among peer reviewers. FRRB promoted a meeting to raise awareness on the importance of the gender dimension not only in the composition of research teams but also in the research activities themselves and how it can affect the overall organisation of a research institution. It also promoted a mandatory 'Gender Issues Survey' for all

institutions participating in calls for proposals in order to keep track of the gender policies in place in the participating organisations. In addition, the calls now clearly request that project proposals address the gender dimension in the design and implementation of the research as well as the gender balance in the composition of the research team. Regarding proposal submissions, RIF suggests that researchers set up research teams which are as gender balanced as possible and prompts research teams to describe whether and how gender issues are relevant to their proposals. Informative videos have been uploaded to the foundation's website and a reference has been included in the 'Guide for Evaluators' with the aim of improving evaluators' awareness of gender issues and gender integration in the proposals.

Networking and Dissemination

Networking and dissemination activities include presentations in conferences and events, publication of policy papers and academic articles. Many of these are intended to support a gender equality discourse and the adoption of GEPs at the national level. By adopting a GEP, ELIAMEP set the trend and encouraged other research organisations to do the same, particularly in the light of the law recently passed in Greece (Law 4604/2019 on 'Promoting substantive equality between the sexes and combatting gender-based violence') that for the first time provides for the adoption of GEPs by public and private enterprises as a key tool to promote gender equality. In this regard, ELIAMEP published two policy papers. The first provides an overview of the EU policy over the last 20 years to develop a comprehensive policy of gender mainstreaming in the area of gender equality in science, research and higher education. The second was published in response to the Ministry of Education call for ideas and proposals for a new bill for higher education and Greek universities, arguing for the need to incorporate and mainstream gender in the higher education reform, and advocated the development of GEPs. ELIAMEP also provided a practical guide on how higher education and research organisations can develop GEPs in order to transfer the knowledge it had acquired in the TARGET project to Greek universities (ELIAMEP, 2021). Position papers have also been drafted by FRRB (on the state-of-the-art in gender equality in Lombardy, national gender equality policy in research and the status of gender equality policy implementation in main hospitals and research centres that collaborate with FRRB) and will be published in 2022.

Building Consensus: A Strategy for Institutional Change

Attempts to introduce change in institutional contexts where power structures and dynamics are entrenched with gender inequalities inevitably provoke internal resistance at various levels (Lombardo & Mergaert, 2013). Studies on structural change in R&I organisations stress the importance of top management support (Ferguson, 2021). However, our analysis highlights the importance of both top-down and bottom-up commitment, and the interplay of both. Whilst top-level management commitment is considered a key factor in facilitating the

implementation of interventions, the involvement of all employees and a larger community of actors and stakeholders is an essential factor for successful implementation in small RFOs. Given the small numbers, employees have the opportunity to learn about the process, and many of them get involved from the outset. This strategy raises awareness for the topic, improves acceptance, increases motivation and decreases resistance, thereby greatly facilitating the acceptance of planned measures amongst staff. The willingness and interest of staff members to participate is thus an important facilitator for the success of the intervention. At the same time, and to support the sustainability of the project, the larger community of stakeholders acts as a catalyst to foster knowledge sharing and knowledge creation by providing a forum for mutual learning and capacity building. Especially in small organisations, this can reduce opportunities for resistance since the CoP approach emphasises community engagement, participation, sharing, consensus and competence development (Cambridge, Kaplan, & Suter, 2005).

In our analysis, building consensus to achieve substantive change through GEPs and the (enlarged) CoP is one of the main strategies developed by smaller organisations – under the assumption that resistance in small institutions can be better played down or even avoided through close collaboration and competence building. Promoting GEPs is not just a technical task of developing a steering instrument; it can also be seen in the wider context of building a common framework and understanding of gender equality in the R&I context as well as integrating structural change more systematically into policy making. As a transformation tool, building consensus takes a considerable amount of time to be effective and become visible, as change cannot be realised in a restricted and relatively short period of time. Gender competences and gender expertise are key players in these change processes, which often come up against gender fatigue (Kelan, 2009) and/or gender blindness (Konrad, Prasad, & Pringle, 2006).

Building consensus – through trust, legitimacy and authoritativeness – is thus a practice that involves both building a community of committed and engaged colleagues and co-workers and mobilising stakeholders in order to cope with an extensive institutional and cultural transformation. In our analysis, community building and networking have been the key to mutual empowerment, overcoming resistance and mobilising evidence-based gender expertise and organisation-based knowledge.

In fact, GEP promotion and implementation in our three organisations have been embedded in an institutional gender equality discourse and required a strategy that connects external windows of opportunities and specific organisational features and tools. To support sustainable change, the three organisations positioned themselves differently, relying on different national legal frameworks and contexts, diverse structures and distinct forms of support from the CoP. To ensure a self-reflexive culture – and therefore a sustainable implementation of the GEPs – different stakeholders were actively involved in setting up the CoPs in the three organisations. Throughout the process of the audit, formulation and adoption of the GEP, they relied on the support of the CoPs, which were made up primarily of internal staff (RIF) but also external experts and stakeholders (ELI-AMEP and FRRB), who provided encouragement, assistance and experience.

The identification of relevant stakeholders within the institution was part of the gender audit, which represented the starting point for the development of a customised GEP. Relevant stakeholders (heads or members of the human resources (HR) department, strategic working groups, decision-making bodies, experts) were identified by their function and were approached with requests to cooperate on specific activities within the GEP. Developing tools for building gender competence among staff and stakeholders and reflexive engagement with selected stakeholders are thus part of this consensus-building strategy. Such efforts were built upon reflexive organisational self-analysis, at the same time acknowledging the context, the strategic interests of stakeholders and the specificities of their positioning in the R&I environment.

FRRB: Building Up Gender Expertise for Strengthening the Network

A key element in a sustainable infrastructure for gender equality is the building up of gender expertise to support cooperation and exchange between institutions and transform the gendered R&I culture (Lipinsky & Wroblewski, 2021; Palmén & Kalpazidou Schmidt, 2019). This was the case at FRRB, whose activity regarding gender equality in the field of biomedical research was established on the basis of existing networks. In the FRRB case, the CoP has proven to be very effective since it gathers relevant stakeholders and allows a qualified exchange of inputs. It also facilitates fair and open discussions about critical gender equality issues which concern more than one organisation (e.g. how small scientific organisations should acknowledge and remove barriers to women careers; how the scientific community should deal with gender bias in the selection processes). These issues are then only assessed in the specific contexts of one single organisation in a second step. In this way, when it comes to the specific case, both the wider community and the organisation under analysis are already aware that it's not just an internal issue – something that needs to be fixed in that specific organisation – but a challenge to which all the members of the CoP should rise. Since FRRB maintains constant contact with the Lombardy regional authority (implementing the main research priorities identified by the Directorate General for Welfare and Healthcare) and its beneficiaries (hospitals, research centres and universities located in the Lombardy region), a specific CoP has been established within this network, including representatives of hospitals, universities and research centres interested in gender equality issues, which collaborates with FRRB. Being both a funding agency and a beneficiary of funding, FRRB drafted its GEP bearing in mind the role model it can represent and its potential as a trigger of change for its stakeholders (hospitals, research centres, universities, etc.). In fact, the FRRB CoP mainly included two levels of institutional stakeholders: (1) organisational stakeholders (i.e. members of the management bodies and the scientific committee) and (2) the scientific community (scientists and researchers who apply to FRRB's calls for proposals). After several successful events and initiatives, FRRB can now rely on a strong CoP that provides feedback and advice and benefits from the activities it organises (i.e. seminars and meetings). FRRB mostly uses its dissemination activities and CoP events to strengthen its position regarding

gender equality, while the members of the CoP are highly committed to pursuing gender equality and see it as a part of excellence. Given the lack of a regional gender equality discourse in R&I, the advice received, discussions and sharing of experiences in the CoP have been a valuable input for reflections – both in theory and in practice. This exchange has also been seen as something that strengthens both FRRB as well as the home institutions of gender experts in their institutional gender equality discourses. In this case, the CoP involvement had a twofold effect: it supported the implementation of the GEP in the organisation and contributed to raising awareness among participants (relevant stakeholders in the local scientific community) on the importance of gender equality policies and their implications. Stakeholders involved in the CoP found a place (*outside* their own organisation but *inside* the local scientific community) and opportunity to discuss an issue that crosses multiple scientific disciplines, put the focus on their organisations and their working environment (instead of on their field of scientific interest, as is usually the case) and share views on how to make RPOs a better place to work and avoid toxic behaviours and discriminations.

As the FRRB case shows, participating in a CoP offers organisations and their community the opportunity to reflect on what can be improved at local level, which policies should be changed at national level and how to act to put pressure on the bodies in charge to implement change. The introduction of the GEP as a preliminary and compulsory requirement to submit project proposals to Horizon Europe (starting from January 2022) acted as an additional push factor to stimulate the interest of organisations to attend CoP meetings and to regard FRRB as a pioneer in promoting gender equality.

ELIAMEP: Dissemination, Lobbying and Expert Advice to Influence the Public Discourse

At ELIAMEP, an ongoing communication strategy has been very effective in initiating an internal gender equality discourse as well as in focusing and strengthening networking opportunities and its pioneering role in this field in the Greek context. Recent legal changes supporting the implementation of a GEP or the establishment of gender equality committees at Greek universities have created increasing interest in this topic. These developments have been used by ELIAMEP to disseminate its experiences and to strengthen its public positioning also in the field of gender equality. ELIAMEP has positioned itself as a pioneering institution in gender equality and taken a leading role in the Greek public debate. ELIAMEP's GEP formulated gender equality as an explicit goal for the organisation for the first time and contains several concrete actions to advance this in practice. To set up a longer-term process of organisational change aimed at embedding a gender-sensitive culture into the organisation and in the approach and content of its research and policy proposals, ELIAMEP also aspired to generate interest and disseminated information about the value of GEPs among its extended network of academics and researchers. Furthermore, it shared its experience and expertise with other organisations in Greece and abroad which are interested in formulating a GEP, especially in the fields of

research and higher education. The increased awareness among ELIAMEP staff also extended to this important dissemination function as well as the use of instruments like policy briefs to influence the national discourse. Since ELIAMEP has many contract staff who are affiliated with other universities, the new gender equality standards are communicated to these universities with the aim of encouraging similar standards. At the same time, GEP development and implementation is supported by members of the Board of Directors, who also represent the business sector and are interested in transferring experiences from ELIAMEP to their companies. To communicate its role as a pioneering institution in GEP development and implementation, ELIAMEP has presented the process of adopting and implementing a GEP to several stakeholders in a series of dissemination activities, including presentations at conferences and events as well as the publication of policy papers and newspaper articles. It has also published policy papers and guidelines on designing a customised GEP, arguing for the need to incorporate and mainstream gender in the higher education reform, advocating the development of GEPs and making specific reference to its own implementation of a GEP as a best practice. In 2019, a new law aimed at restructuring universities in Greece included an article that provided for the establishment of Committees for Gender Equality (CGE) in all Greek universities for the first time (4589/19, Article 33). It envisioned such committees as consultative bodies to assist university administrations in their efforts to promote gender equality. One of the main responsibilities of the CGEs is to develop Action Plans to promote substantive equality in the educational, research and administrative structures of higher education institutions. The above legislative developments have not only created a supportive external environment for the implementation of a GEP at ELIAMEP, they have also raised its value as an actual example, since ELIAMEP's experience in developing a GEP is attracting interested interlocutors at other Greek research centres and universities.

RIF: Combining the Internal and External Focus. Gender Equality and European Funding Procedures

The RIF[1] is the national R&I funding agency of Cyprus, established with a view to promoting scientific and technological research across the island. It is a relatively small organisation whose main responsibility is

> to ensure that the research community of Cyprus is actively working to maximise collective knowledge, creativity and innovation, by funding projects that promote excellence and deliver results with maximum impact and social benefit, thus ensuring the quality of the Cypriot research system.

[1]Since April 2019, the Research Promotion Foundation has been renamed as the Research and Innovation Foundation in order to reflect its expanded role as the executive branch of the new national R&I governance system.

When the TARGET project was launched, RIF was aware that gender equality in R&I had become a pillar of the ERA, as stated in ERA Priority 4 on *Gender Equality and Gender Mainstreaming in Research*[2] and in the Horizon 2020 and Horizon Europe regulations. RIF thus had a strong interest in joining the TARGET project in order to find a proper pathway towards scientific excellence that is achieved by combining gender equality and research quality. The European framework of gender equality policies in R&I was thus a crucial element in persuading the Board of Directors in 2018 to adopt the first GEP for RIF. The GEP has been elaborated on the basis of the results of the audit phase and commits RIF to gender equality initiatives beyond the organisational context and needs of the foundation itself. It contains elements which focus explicitly on *internal* dimensions – such as overcoming gender biases in HR management and supporting equal opportunities and participation in decision-making bodies and project research teams – as well as those which focus on *external* dimensions – such as the research content of the funded proposals.

It is important to underline that this double strategy, which combines *an internal and an external focus,* can be observed also in other small organisations and can be seen as a way to provide an answer to their specific dimensional characteristics. Given the limited numbers of internal staff in small organisations, actions focusing on internal institutional change need to be combined with and supported by actions involving the external (to the organisation) environment. This makes it more complicated to build – and maintain – the stable consensus needed to support institutional change. On the other hand, when these small organisation are RFOs – which means they can influence awareness and the allocation of resources to fund R&I in their scientific environments – having an impact on the R&I ecosystem external to the organisation's own focus of action is very important given the influence that the adoption of gender equality policies by these RFOs may have on the scientific environment itself. If an RFO introduces gender equality as one of the award criteria when allocating research funds, the impact on local RPOs may be higher – in terms of both the gender balance in research teams and the introduction of the gender dimension in research – than the impact of the institutional change within the (small) organisation. This was also true in the case of RIF. Once the GEP had been approved, RIF started to implement the actions it foresaw, moving at different speeds due to the varying complexity of the actions. A major element of the GEP was linked with the ongoing restructuring of the HR function, both in terms of organisational processes and related information and communication tools. Concerning the latter, RIF decided to establish an electronic database with sex- and age-disaggregated information for all submitted proposals and HR activities. This took quite a long time to be implemented due to delays in the functionality of RIF's electronic data collection system. However, it can be considered a lasting institutional change that will modify the view RIF has on its internal resources

[2]http://ec.europa.eu/research/era/gender-equality-and-gender-mainstreaming_en.htm. Accessed on 30 October 2021.

for the future, since disaggregated data were not previously collected at RIF. Another turning point was the definition and adoption of more gender-sensitive language to be used in all RIF official documents, including future programmes, as an attempt to address existing gender inequalities in R&I. These first steps were accompanied by the integration of the gender dimension into the content of new calls and the addition of gender-related criteria in evaluation procedures by asking evaluators to respond to specific questions on how the research proposal impacts on gender equality when reviewing the proposal. Once again, the double internal/external strategy emerges, together with the strengthening of its potential impact. Using gender-sensitive language in calls for proposals, introducing gender-related criteria and briefing evaluators on these new elements brings the importance of gender inclusiveness directly to the attention of RPOs answering the calls. Part of this strategy was also the creation of a 'network of scientists', including gender experts, to promote reflection on gender-related strategy. This network can be seen as an evolution of the initial CoP, which had only included members of RIF's staff. As was the case in our other two organisations (FRRB and ELIAMEP), the CoP was opened up to people beyond the organisation itself, thus supporting the mutual exchange of knowledge on gender issues in the local scientific environment. As is common in organisational change processes, the implementation of the GEP met with some resistance. To identify and overcome this resistance, the gender Agent, together with a gender expert, decided to implement a specific activity addressing researchers in research organisations in Cyprus. The main aim of this activity is to identify barriers and challenges relating to gender equality in R&I in Cyprus. A set of focus groups and communication campaigns aim to formulate recommendations and corresponding best practices from other countries experiencing the same challenges. Once again, linking the internal to the external focus promotes institutional change while impacting on the external scientific community.

Conclusions

The process of adopting a GEP has improved the status quo of gender equality within organisations, and gender issues are increasingly recognised as an important dimension in the content of operations, decision-making and research or funding activities.

As gender bias in research funding still appears to be widespread in the scientific community, decision making and gatekeeping, including peer review and recruitment procedures, continue to be male dominated. Gender disparities in research funding are a manifestation of the long-standing gender divide in science, while gender-based double standards in assessing scientific competence and excellence further widen the funding gap. Women are underrepresented as applicants and recipients of research funding. Extensive studies on gender and research funding – and the underrepresentation of women among applicants and recipients – have been conducted, and research has pointed out that seemingly gender-neutral eligibility criteria may have gendered outcomes (Wennerås & Wold, 1997; Blake & LaValle, 2000). Gender bias modifies how a performance is evaluated or

affects how much competence is inferred from performance (Foschi, 2000). While excellence is seen as a gender-neutral standard of merit, research shows that it is a social construct that is inherently gendered (O'Connor & O'Hagan, 2015; Van den Brink & Benschop, 2012).

The adoption and implementation of a GEP has created space for a systematic consideration and discussion of gender and equality issues within the three organisations discussed in this chapter – also with a focus on gendered consequences and biases in the funding process. The GEP has started a process for systematically reflecting on whether and how gender influences and, in turn, is shaped by the organisation's structures, practices and research output. The process of adopting a GEP that was set in the TARGET project – and the relevant activities that have been undertaken in this regard – have substantially improved the status quo of gender equality. While previously virtually absent from the three organisations' structures, values and practices, gender is now recognised as a dimension that must be taken into consideration in the content of activities, starting from gender-disaggregated data collection, as well as in the decision-making sphere. Institutional workshops and training on the importance of formulating an explicit gender equality policy (with the participation of a very high share of staff members) and the changes that have been implemented in internal procedures have all contributed to creating this gender awareness. The possibility to share experiences within a wider CoP has proven to be supportive in the process of mutual learning. In addition, the GEPs themselves show how important it is for RFOs to take the gender challenge in funding seriously, as they can act as key levers for change by incorporating the gender equality perspective both at the programme level and in core activities at various stages of their funding procedures and practices (e.g. in calls, grant application and allocation processes).

The capacity of the GEP to produce structural change within these small organisations may be affected by their limited size and by the absence of structured internal policies or codes of conducts, which are often considered 'unnecessary' in small organisations with limited numbers of employees and flat hierarchies. The informal working environments in such organisation may offer additional resistance to gender equality issues: the usual reply that 'gender equality is not an issue' may be reinforced in a context where anonymity is impossible and where it is not possible to raise complaints about gender-based discriminations without personally bearing immediate consequences of stigma.

Our analysis shows that institutional change can be brought about via small steps by exploiting existing discursive opportunities. It can also be overtly resisted and seen as a destabilising factor for the status quo and existing power structures. The GEP is a soft policy tool that is intended to promote gender equality and diversity within organisations and, thus, also innovation and excellence. The organisations we analysed built upon reputable foundations and/or funding strategies and are using their GEPs to encourage others to do the same. Our analysis shows that bridging the gap in gender knowledge and building networks have implications for the sustainability of the gender change intervention both within the organisation and beyond. As a result of the four years of project implementation, FRRB and ELIAMEP produced policy briefs and/or position papers

stating the importance of gender equality policies in their scientific environment, while RIF finally found a way to make gender equality a topic of priority at the Ministry of Research, Innovation and Digital Policy. As a transformation tool, building consensus takes a considerable amount of time to be effective and become visible, as change cannot be realised in a restricted and relatively short period of time. Gender competences and gender experts are key players in these change processes, often facing gender fatigue (Kelan, 2009) and/or gender blindness (Konrad et al., 2006). In our analysis, they are an important prerequisite, as long as they set strategic goals and facilitate the engagement with a larger network of actors and stakeholders, thus gaining the authority, legitimacy and resources to mobilise change. The building consensus approach supports sustainability in the organisations as well as in the ecosystems in which they are embedded. Especially in small organisations, specific implementation settings can be enhanced by collaborations between researchers and stakeholders, professionals, users and/or decision makers. Since organisations and institutions are not static but dynamic, relational spaces through which issues are translated and mediated, small organisations with a high level of authority, potential impact on funding and trans-local connectedness can be viewed as a particular setting and interface for policy enactment in different contexts.

In addition, given the crucial role these organisations play in the institutional context, the fact that they consider gender equality a priority and produce publications on the topic addressed at their stakeholders and the wider national scientific community has a potentially far-reaching impact on promoting the adoption of structural change measures in other organisations. Their capacity to influence the adoption of concrete gender equality policies and measures is reinforced by the power they exercise on the organisations receiving funds or by their own scientific prestige.

The undertext in these policy briefs or position papers is that if these organisations consider gender equality a key argument for the quality of research and/or education, their network should also gender equality measures into account and define indicators that demonstrate their commitment to more inclusive working environments and research projects. In conclusion, the establishment of gender equality as an institutional issue is due to strategies that are consistent with the organisation's mission and the opening of specific windows of opportunities: the adoption of GEPs in small organisations can be considered the starting step in a process of raising awareness of the importance of gender equality that moves from the internal to the external – via CoPs and publications – and impacts the wider regional or national scientific environment.

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Conclusions

Rachel Palmén and Angela Wroblewski

Abstract

This chapter provides some concluding reflections on the different experiences of structural change encountered by the TARGET partners. The various TARGET partners had different roles in the structural change processes: seven organisations designed, implemented and monitored gender equality plans (GEPs) for the first time, two organisations provided tailored support to implementing institutions and one organisation evaluated GEP implementation. This edited volume provides an account of these diverse experiences of engaging with and catalysing structural change in very different research organisations operating in extremely different contexts both within the EU and beyond. The volume thus contributes to the growing body of literature generated from structural change projects by offering a specific focus on the TARGET approach. The TARGET process of structural change – undertaken through the development and implementation of tailored, evidence-based GEPs – was found to be strengthened through formal top management commitment and by taking a reflexive approach that was powered by communities of practice and supported by financial resources, gender expertise as well as gender and organisational change competences. Engaged institutions thus managed to overcome unfavourable conditions and implement tailor-made, context-specific interventions, some of them in areas at the cutting edge of topics and issues linked to gender equality in research and innovation such as tackling sexual harassment, sustainability and integrating the gender dimension into research content and curricula.

Keywords: Gender quality plan; European research area; research-funding organisation; research performing organisation; higher education; gender dimension in research content; gender in curricula

Overcoming the Challenge of Structural Change in Research Organisations: A Reflexive Approach to Gender Equality, 199–212

doi:10.1108/978-1-80262-119-820221012

Introduction

The European Commission's gender equality plan (GEP) eligibility criteria require the following organisations to have GEPs in place in order to be eligible for Horizon Europe funding from 2022 onwards (EC, 2021a):

- public bodies such as research-funding bodies, national ministries or other public authorities, including public-for-profit organisations;
- higher education establishments, public and private; and
- research organisations, public and private.

Whilst this requirement is rightly acknowledged as a game changer for gender equality in research and innovation (R&I) organisations throughout Europe and has been welcomed by gender equality scholars, caution has also been voiced. Could these eligibility criteria enforce and magnify existing inequalities related to differing levels of policy action throughout Europe? Will organisations in countries with long trajectories of gender equality in R&I policies have an advantage over those that are newcomers to this field? How can this requirement move beyond a mere tickbox exercise to encourage real structural change? What resources are needed and where and how should they be channelled to ensure that research organisations in countries without a strong legacy of developing gender equality policies in R&I do not get left behind?

In this concluding chapter, we reflect on the TARGET experiences of GEP implementation in research-performing organisations (including universities), research-funding organisations, a national quality assurance agency and a network of engineering schools operating within Cyprus, Greece, Italy, Romania, Serbia, Morocco as well as (in the case of the network) across Northern and Southern Mediterranean countries. These conclusions – whilst primarily reflecting on the chapters in this volume – also include a brief overarching section that synthesises the key 'takeaways' from the TARGET project articulated by each implementing institution as discussed in the final project meeting on 2 and 3 December 2021 in Rome. The conclusions drawn in this edited volume do not claim to be a systematic assessment of the GEP implementation in each institution during the four-year project. This assessment is reserved for the comparative evaluation of the project, which is based on a thorough analysis of all systematic monitoring reports, an analysis of semi-structured interviews as well as a documentary analysis for each implementing institution.

We do however seek to briefly reflect on those key factors of the TARGET approach that enabled institutions to successfully engage with structural change. We argue that the TARGET approach can be useful for those research organisations and higher education institutions that are currently operating in a less than optimal national policy context for gender equality in R&I (GEECCO & TARGET, 2021). This volume provides reflections from academics and practitioners who have been involved in the implementation of structural change and thereby operates at the nexus of knowledge production and practice. It also contributes to the growing body of literature generated from structural change

projects (see Bencivenga & Drew, 2021; Ferguson, 2021; Kalpazidou Schmidt & Cacace, 2019).

Some elements of the TARGET approach are useful for all structural change projects regardless of the political context, that is, taking a reflexive, evidence-based approach that encompasses the following elements:

1. an in-depth analysis of gender inequalities within the institution and the identification of underlying mechanisms;
2. the formulation of gender equality objectives, target groups and targets based on the above;
3. the development of specific measures to address and achieve these objectives;
4. a close monitoring of GEP implementation and an evaluation of its effects; and
5. the reflection on the process and results achieved based on monitoring that may lead to adjustment of the GEP and/or specific measures (GEECCO & TARGET, 2021).

However, there are some elements of the TARGET approach that are specific to the national political contexts of the TARGET implementing partners in countries that have been classified as rather inactive at the national level regarding gender equality in R&I (e.g. Lipinsky, 2014; Wroblewski, 2021). Hence, TARGET-implementing institutions are located in countries that lack a national policy framework with concrete measures to support gender equality in R&I in the three key EU dimensions of careers, decision-making and integrating the gender dimension into research content and teaching.

TARGET aimed to provide tailored support for the development of a GEP that considered the respective organisation's own specific needs and context. Tailored support in the form of gender expertise and financial resources was essential because although the implementing partners formulated a clear commitment to gender equality, they did not have specific experience in this field prior to the TARGET project. Commitment from top management to structural change likewise became all the more important in the absence of a national policy discourse on gender equality in R&I. As Anagnostou argues in this volume:

> In the absence of a developed discourse that focuses on the institutional processes, structures and cultural norms (…) what made a difference in the development of the GEP was a) support from leadership and top management and b) the existence of gender-related expertise.

Whilst top-down commitment was a pre-condition to ensuring that the structural change project could bring about real change, the bottom-up approach was a key driver of change. Bottom-up support was provided by feminist activists, gender scholars, experts, practitioners, etc., within and outside the institution, mainly in form of a community of practice (CoP) established in each implementing institution. This provided the vehicle for driving the process forward through the sharing of experiences, development of competences and crucial engagement

in shared practices, that is, gathering data, designing the GEP and developing monitoring indicators. In some instances, the GEP-implementing institution became a 'pioneer' at the national level, either by becoming a 'role model' university whose GEP experience was shared with other universities operating in the same national context or by setting national quality standards that cascaded down to other research organisations through the involvement of key stakeholders from the local R&I ecosystem.

Key Reflections

It has been argued that a weakness of past and current structural change projects is their very tailored nature, which hinders the 'possibility of evaluating and using GEP data at EU and even national level' (Bencivenga, 2020, p. 186). Whilst we agree that this has hindered a standardised approach that facilitates comparison, the particularities of the policy focus in each round of projects, the specific thematic focus of each funded project, the tailoring of GEPs to the current, national context (policy and legislative) and the institutional particularities have given rise to a rich tapestry of structural change experiences across the European landscape. TARGET experiences contribute to the current state of discussion by covering diverse contexts in EU Member States (Cyprus, Italy, Greece, Romania), an EU candidate country (Serbia) and countries outside the EU (Morocco and the North African and Middle Eastern nations that form part of the RMEI network).

The first three chapters in this volume offer a more theoretical reflection on the TARGET approach, looking thereby at how structural change can ensure that the dual logic of academic organisations does not impede GEP implementation and highlighting the importance of monitoring and a CoP for a reflexive, evidence-based approach.

Wroblewski and Palmén examine the issue of the dual logic – organisational logic and scientific logic – in academic organisations as one of the main barriers to the effective implementation of GEPs in this sector. GEPs often refer to the organisational logic but do not challenge academic practices. For example, academic freedom is frequently used as the justification for resistance to the implementation of gender equality interventions, an aspect that is particularly evident in attempts to integrate the gender dimension into curricula. So how has the TARGET experience helped to build the necessary bridges? The reflexive approach developed through the TARGET project and applied at both the individual and the institutional levels has proved key in bringing together these two logics. Including top and middle management – who can be seen to represent the organisational logic (i.e. human resource managers, information system managers as well as heads of departments) – as well as faculty, researchers and academics in the CoPs has created space for dialogue between the two logics. A theory of change approach supports reflexivity in all stages of GEP development and implementation, and a CoP can provide a space to facilitate an organisational reflexive process for GEP implementation in which both logics can be addressed.

Wroblewski and Leitner highlight the relevance of monitoring for a reflexive gender equality policy not only to demonstrate the success of interventions but also – and crucially – to document any failures. This monitoring can also lead to increased gender competence and build up the gender discourse within the institution, thereby underpinning an effective evidence-based policy. Wroblewski and Leitner argue that gender analysis is much more than collecting sex-disaggregated data; it should also

> contain a discussion of the underlying gender concept (How is gender defined?), the gender equality objectives (What should be achieved?) as well as assumptions on reasons for gender inequalities (What are the underlying mechanisms?) within the organisation.

The monitoring systems developed in an evidence-based approach must be meaningful – not only with regard to the implementation of the action but also to its desired outcome and impact. Learning from failure forms a key part of the reflexive process and can lead to improvements in existing measures or the development of new ones. Failure should not be punished but instead turned into 'constructive lessons'. Whilst effective monitoring forms part of any attempt to implement structural change, institutional data gathering becomes harder in a context where national data collection is not routine. In the TARGET project, data collection and the setting up of data gathering and monitoring systems within each organisation required considerable effort, particularly in the larger organisations in the project (i.e. the universities). Collecting data and establishing relevant data and information systems helps to build solid foundations for future actions and interventions.

Palmén and Caprile examine how the different CoPs established as part of the TARGET project helped to facilitate structural change by expanding on the conceptual lens of the domain, community and practice and integrating reflections on empirical evidence into the process. In the TARGET project, the importance of defining the 'knowledge' domain by negotiating a shared meaning of gender equality – which brings together the organisational and scientific logics – was deemed particularly important in contexts where there was a lack of congruence with the EU three-dimensional construct. Engagement in this discussion proved to be part of an important process: whereas the meaning of gender equality was initially interpreted merely as the representation of women and men, it evolved over the course of the project into a more complex understanding that included gender competence in decision-making as well as the gender dimension in knowledge production and teaching. The involvement of different stakeholders was likewise seen as key when it came to the aspect of power. In the large organisations, involving top management and professors, that is, representatives of both the organisational and the scientific logics, was a key driver for structural change, whilst involving key stakeholders from the local R&I ecosystem facilitated structural change in the smaller organisations. Involving and engaging a broad yet strategically powerful base throughout the GEP development and implementation process was key to tackling resistance – through the direct engagement of

stakeholders but also the signalling message that it sent to those responsible for implementation lower down the organisational hierarchy. Furthermore, the CoP approach with its emphasis on practice proved congruent with highlighting the necessity of developing gender competences for successful GEP implementation.

TARGET implementers also engaged in a role of knowledge production which aims at effecting structural change. In the second section of this volume, the authors provide cutting-edge reflections on the substantive issues of policy transfer, sustainability, sexual harassment and the integration of the gender dimension into research content and curricula. More impressively, they have in the majority of cases also implemented these cutting-edge approaches in often unsupportive policy contexts and reflect on their actual experiences with their contribution to this volume.

Anagnostou examines gender equality policy transfer, specifically how well the three dimensions travel from North-Western to Central-Eastern and South-Eastern Europe. She recognises that the understanding of those factors which facilitate or hinder structural change efforts for gender equality is still in its infancy, particularly in countries that have only recently started to develop gender equality measures in R&I. In her chapter, Anagnostou identifies those factors that impede the implementation of GEPs in research and higher education institutions across five countries (Greece, Cyprus, Romania, Italy and Serbia). She argues that a lack of shared and coherent discourse on gendered structures and practices has particularly hindered the pursuit of common ERA objectives and emphasises how the interpretation of policy discourse on the ground effects implementation. This highlights the importance of tailor-made GEPs as a contextually relevant instrument to facilitate customised interventions – premised on buy-in and engagement.

Zabaniotou et al. reflect on the process of developing a gender equality strategy for a network of 90 engineering schools in 17 Mediterranean countries and integrating the gender dimension into its mission statement on sustainable development. The network (RMEI) embraces the diversity of cultures, religions, political and socio-economic differences that exist in Southern Europe and North Africa. It envisions equitable and sustainable development for the Mediterranean region. Through its participation in the TARGET project, RMEI achieved learning potential, inspired informal and structural changes for gender equality among its members by developing a tailored gender equality strategy, unravelled the link between gender equality and other Sustainable Development Goals (SDGs) and integrated gender equality into interventions for the sustainable development of the region by mobilising the network's human resources – from professors and students to academic managers (rectors, deans). The gender equality policy statement was unanimously approved thanks to the commitment of RMEI member institutions to SDGs (Zabaniotou, 2020). The transformative learning and implementation process formed part of the network's vision for sustainable development and contributed towards a shift from wicked global challenges and inequalities to equality through co-existence (Zabaniotou, Boukamel, & Tsirogianni, 2021). This experience shows the utility of linking gender equality and the gender dimension in content to a specific topic (in this case, sustainability in the

Mediterranean basin context) where their relevance can be easily demonstrated. This approach proved to be particularly helpful since gender equality has not (yet) been formulated as a priority for national R&I policy in many of the countries in which the RMEI members are located.

Tăriceanu paints a meaningful picture of how gender studies have become part of the higher education system in Romania and also charts the challenges that have been faced on the way. This vision from Romania highlights the importance of factoring in the historical and political contexts in any assessment of structural change. Assumptions of homogeneity in the acceptance of key concepts throughout Europe in the policy 'transfer' process must be questioned. Tăriceanu refers to Susan Zimmermann in her research on the institutionalisation of women's and gender studies in Central and Eastern Europe and the post-Soviet space. Zimmerman (2007, p. 137) argues that:

> the category of gender was used not only for its critical potential of examining existing social, economic and political asymmetries, but also for the means for imposing a specifically western model of liberal democracy and free-market economy.

Tăriceanu in turn argues that the concept gender was seen as a 'symbolic marker' of Western culture and that gender studies were subsequently viewed as a 'borrowed concept from Western culture that did not fit the social and political realities of former communist Eastern European countries'. This highlights the importance of taking a post-colonial approach to the assessment of the implementation of gender equality policies. Notions of 'policy transfer', 'catch-up' or 'lagging behind' can be interpreted as part of a Western-centric hegemony that needs to be questioned, probed and called out. This recognition should not however give legitimacy to an under-prioritisation of gender equality but (at the very least) entail an acknowledgement of how gender equality policies intersect with a range of historical and political contextual realities that affect its implementation. The first GEP in the Romanian higher education system was developed by the state-run quality assurance agency ARACIS through the TARGET project and marks an important benchmark for the entire system – sending out a clear message that gender equality should be a quality standard for all higher education institutions in Romania. ARACIS successfully included gender on the list of criteria for the evaluation of universities and established a working group with university gender experts who support the development of a gender course which should be introduced into existing curricula.

Boiron et al. highlight their experience of incorporating the gender perspective into engineering curricula in the École Centrale de Marseille (ECM) in France and discuss the integration of the gender dimension into its 'informal' engineering curricula. ECM is a member of the RMEI network and formed part of its gender equality working group, thus benefiting from the capacity-building activities organised in the TARGET context when strengthening the gender dimension in its PhD curriculum and increasing the gender awareness of future engineers in the long run.

Alongside the integration of the gender dimension into teaching and research content, the topic of sexual harassment and gender-based violence has recently become one of the most pressing issues in higher education institutions around the globe. This is due in part to the emergence of the #metoo movement, which initially rocked the film and media industries and then spread to other industries and sectors, including higher education. As a form of gender-based violence, sexual harassment represents one of the most serious obstacles to gender equality in higher education institutions. In their chapter, Mirazić and Duhaček describe the development of a specific policy to tackle sexual harassment at the University of Belgrade (UB) in Serbia. Interestingly, whilst the development of a sexual harassment protocol was not initially foreseen as part of GEP development at this university, the reflexive process used in the TARGET approach enabled interventions to be tailored to its real needs. Mirazić and Duhaček chart the factors that hinder and support the development of a sexual harassment protocol in a decentralised university. With three member faculties already having previously introduced their own rulebooks, the first UB 'Rulebook on the prevention of and protection from sexual harassment' was adopted university-wide in 2021. This document represents an important step forward and provides substantial support to all the university's member institutions in the process of regulating the prevention of and protection from sexual harassment. It thus also contributes substantially to gender equality at all levels of the institution and could be replicated in other universities in Serbia.

The TARGET approach also involved the implementation of tailored GEPs in very heterogenous organisations. The aim thereby was to support implementing institutions in developing GEPs through a guided process that began with an audit and continued with the design of the GEP and the development of monitoring indicators in conjunction with a supporting partner (gender experts specialised in GEP development). Throughout this process, the implementing institutions developed key gender competences, crucially positioning them as pioneers in their national contexts. Caprile et al. reflect on this process and the challenges of engaging in structural change in two large, complex organisations (i.e. the participating universities), whilst De Micheli and Vingelli look at it from the perspective of implementing GEPs in small yet strategic organisations (including RFOs). The implementing institutions in the TARGET project all have enormous potential to contribute to the national discourse on gender equality in R&I in their respective countries due to the multiplier effect of research funding and accreditation as well as their roles as think tanks or large state universities which could become pioneering institutions in gender equality.

Caprile et al. reflect on the experiences of GEP implementation in two large and complex universities in very different contexts: the UB in Serbia and the University Hassan II Casablanca (UH2C) in Morocco. Each of these organisations took a different approach to GEP development and the composition of the CoP. UB developed a small yet very effective CoP to collect sex-disaggregated data at all levels and data on the sex/gender dimension in curricula for the first time. UH2C established a larger CoP that included top management but was mainly driven bottom-up and ultimately led to a proposal to adopt an Equality Charter.

The different national and institutional contexts were particularly relevant in the choice of approach to GEP development and composition of the CoP. TARGET has been a catalyst in both universities for building up the evidence base on gender inequalities, raising gender awareness and institutionalising gender equality policies. In both cases, however, the process was complex, nonlinear and slow, due in part to the size and complexity of the organisations. Whilst there was an interplay between top-down and bottom-up approaches in both universities, these manifested themselves differently. Actual change relied on decades of bottom-up activism by feminist movements and networks both inside and outside the universities, whilst the bridge between gender scholarship and practitioner's expertise was seen to be highly relevant in addressing both the institutional and the scientific logics.

In contrast to these large universities, De Micheli and Vingelli examine the experiences of the smaller organisations that participated in the TARGET project. These organisations (two RFOs and one RPO) were in a privileged position to significantly reshape the R&I landscape – not only by implementing their own GEPs but also in terms of their relationship and potential impact on the local R&I ecosystems in which they are embedded. All three organisations are small in size (between 10 and 100 employees), have a low level of organisational complexity (in comparison to the universities) and enjoy excellent network connections with the highest regional or national political powers in the field of research and science. One of the organisations is a national research-funding organisation, the second is a regional funding body for biomedical research, which promotes and supports scientific research in the life sciences, whilst the third is an independent, non-profit, policy-oriented research and training institute with a focus on European and foreign policies. Through their participation in TARGET, they have made progress in collecting sex-disaggregated data (also related to funding activities) and organised specific training events or meetings to increase awareness and link gender equality to scientific excellence. Policy briefs and/or position papers outlining the importance of gender equality policies in their scientific environment have likewise been developed, whilst one of the organisations has brought gender equality to the attention of the Ministry of Research, Innovation and Digital Policy as a key priority.

Main Benefits of the TARGET Approach for Structural Change

In this section, we analyse and reflect on some of the questions that were highlighted in the introduction to this book. How can approaches to gender equality in R&I be geographically inclusive yet promote a shared, progressive understanding and policy approach? Part of the success of the TARGET project has been the enablement of a reflexive, tailor-made participatory approach that allowed crucial local 'ownership' of the GEP process. This local ownership has been facilitated by four main factors: formal top-level institutional commitment, reflexivity, a CoP and support in the form of human and financial resources, gender expertise and competence.

Formal and Top-Level Commitment

Formal and top-level institutional commitment becomes all the more important in contexts where there is a gap in national policies for gender equality in R&I. In the TARGET institutions, the levels of commitment ranged from full top-level commitment (in one case, a key member of the local TARGET team was also the rector of the university) or support by middle management (as members of either the TARGET team or the CoP) to active resistance from top management. In the best case scenario – full commitment from top management – gender equality policies were implemented in a context where gender equality had not previously been a priority, with TARGET opening the door for gender to become a legitimate and debatable issue. In another case, resistance from top management was also experienced, which led to the temporal derailing of the GEP process. However, the majority of implementing institutions were able to gain and sustain top-management commitment (in the formal sense), thus sending a strong signal to staff and key stakeholders in other organisations in the local R&I ecosystem and easing the implementation of the GEP.

Reflexivity

The reflexive approach implemented in TARGET has proven to be successful precisely because it was built on the premises of framing 'gender equality' and subsequent interventions in a context-sensitive way, both externally and internally. Whilst the European Commission's three priority objectives for gender equality and mainstreaming (women's representation in careers, gender balance in decision-making and integration of the gender dimension into research content and teaching) proved useful for structuring the GEPs, the reflexive TARGET approach was flexible enough to enable the participating institutions to develop context-sensitive and relevant measures. Reflexivity throughout the GEP process (gathering data, tailoring GEP design, developing monitoring indicators) meant that a continuous cycle of data collection, self-reflection, tailored actions, self-assessment, etc., was not only employed to ensure that each stage was well thought out and grounded in its predecessor but also enabled the addressing of issues that had not initially been foreseen (i.e. sexual harassment). The constant feedback loop between data collection and the development and monitoring of tailored actions proved a powerful motor for change in which the role of gender experts and practitioners within the institution or in the external CoP was a key driver. Whilst the reflexive approach proposed in TARGET may be time consuming and slow down the process of defining and adopting a GEP (acknowledging the context and defining a tailored solution takes time), it has proved powerful in creating the conditions for activating a lasting and sustainable process of change. The reflexive approach supports organisations not only in the beginning but also throughout their learning process of examining how they function, documenting the relevant power structures, determining the role of gender and identifying how these elements are linked, thus enabling them to at least begin and engage with a (disruptive) change process.

Furthermore, we argue that the reflexive approach used in TARGET has provided a crucial space in which the shared meaning of gender equality can be discussed. In some cases, this has resulted in the development and enactment of a more complex understanding of gender equality. The gender dimension has been innovatively incorporated into a mission statement of a Mediterranean network of engineering schools in North Africa and Southern Europe (Zabaniotou, Tsirogianni, Cardarilli and Guarascio in this volume), it has been integrated into evaluation criteria for higher education curricula in Romania (Tăriceanu in this volume) and engineering curricula in the ECM in France (Boiron, Deumié, Raviol and Benech-Kopelianskis in this volume), and initiatives have been taken to integrate gender into curricula at the UB in Serbia and the UH2C in Morocco (Caprile et al. in this volume). Integrating the gender dimension into research content has also proved central to research funders as an evaluation criterion in their calls for proposals (De Micheli and Vingelli in this volume).

Community of Practice

The CoP has proven to be a powerful mechanism to leverage change – and also provide a space for reflexivity. In the TARGET project, the CoPs have promoted both change at the institutional level and a policy discourse at the national level. Some of the TARGET CoPs focused on internal structural change and thus engaged relevant actors with different functional responsibilities (human resources, information technology, etc.) and hierarchical positions within the organisation, whilst others enlisted relevant key stakeholders from the respective national R&I ecosystem. Ultimately, the participation of different stakeholders depended on the key changes that were to be made. The constant effort to involve a wide range of different stakeholders meant that the GEP 'spoke to all' and resistance was more likely to be minimised. Bringing allies on board through the CoP, either from within or beyond the organisation, proved crucial in combatting isolation of the change agent and providing a key infrastructure of much-needed support. The intra-institutional CoPs also promoted friendly competition by providing an informal space for organisations to share and encourage the take-up of good practices and using peer pressure to propel advances for institutions in their field. The RMEI CoP, for example, was described as a 'flame' in the Mediterranean engineering domain, which managed to mobilise engineers from Northern African and Middle Eastern countries to factor in social change in a technocratic, often male-dominated field.

Support (Including Gender Expertise, Organisational Development Expertise, Financial and Personnel Resources)

A further aspect identified as key was support – both in the form of financial and human resources (dedicated time) as well as the provision of gender expertise and expertise in gender and organisational change. Structural change is a costly process, and budget needs to be allocated to staff to coordinate change processes as well as to the measures in the GEPs, training activities, etc. In this context, the

funding received from the European Commission's Horizon 2020 programme to engage with the structural change process was seen as key and was particularly important in contexts where national level funding for gender equality in R&I is scarce. The funding from the European Commission meant that there were dedicated resources for a change agent in each institution to coordinate the CoP and spearhead the GEP process. Without this funding, it is unlikely that the implementing institutions would have been able to engage in such a complex change process. Funding was also seen to be key in leveraging top-management commitment. Structural change, in turn, was seen to require a specific mix of gender expertise and expertise in gender and organisational change. Gender experts tend to be gender scholars, who may also be familiar with gendered processes and procedures (e.g. gender stereotypes or unconscious bias in recruitment procedures). People with gender competence, in contrast, can come from different professional backgrounds and engage in a range of functions. An IT systems manager with gender competences, for example, would know how to develop a useful information and data collection system that gathered relevant gender data. Gender competences can be developed through the structural change process and moderated by gender experts. Gender and organisational change experts, in turn, have the skills to engage in change processes, i.e. knowledge of how to develop and implement an effective institutional audit and carry out a gender analysis with a view to developing relevant objectives for an organisational change process outlined in a GEP. Hence, support from both gender and organisational change experts was seen to be key for developing gender competences within the implementing institutions throughout the GEP process. The TARGET approach – which delivered tailored support through two specific partners (gender experts with organisational change expertise) matched to the implementing institutions and coupled with the support from the co-ordinator – seemed to provide a solid structure to enable the development of gender competences within each implementing institution.

Future Research and Policy Implications

Data collection on gender equality actions and measures in research-performing organisations and higher education institutions varies depending on the national context. According to the She Figures 2021, in most EU-27 countries more than 50% of higher education institutions document actions and measures towards gender equality on their websites. However, variations between countries do still exist. The data for 2020 shows that whilst more than 50% of higher education institutions in the majority of EU Member States (19 of 27) mention such actions and measures on their websites, the figures for other countries are much lower (Poland: 37%, Slovenia: 26%, Bosnia and Herzegovina: 15%) (EC, 2021b). Ferguson (2021) stresses that involving those institutions and countries that have not been involved in structural change in R&I to date is the current major challenge. The more active countries in this respect began their commitment to gender equality in R&I more than 20 years ago – or at the latest when gender mainstreaming became a European strategy. Compensating for the absence of

this process therefore becomes key in terms of sharing institutional experiences, providing resources and facilitating access to expertise.

The TARGET project shows how inroads can be made through an approach that provides substantial resources directly to institutions engaging in structural change, facilitates access to experts and creates a forum for the development of a reflexive gender equality policy. The recent report from the Standing Working Group on Gender in R&I, stresses that:

> the absence of a GEP requirement in a country is not an indicator of quality or absence of activity. In some instances, progress has been achieved through softer measures or more bottom-up approaches, which may be related to differences between countries and the socio-cultural factors that affect gender equality policy design. (ERAC 2021, p. 4)

The TARGET approach has been particularly successful in enabling a contextually relevant tailoring of the GEP, which has resulted in local 'ownership' of the process, strengthened by the CoP. Our reflections on the experiences with the TARGET process highlight the importance of taking a post-colonial approach in the assessment of the implementation of gender equality policies. Local struggles for gender equality have been a key factor in driving forward GEP implementation (from Serbia to Morocco). Those involved in the process stress that gender equality is not an 'alien Western' concept (even if conservative or far right movements portray it as an external imposition) but instead forms part of the rich tapestry of local struggles. Grassroots movements have been working on gender issues for decades (including the meanings of gender equality, actions and measures), which does not necessarily mean that they are less complex or comprehensive. Whilst engaging with the process of structural change is often an arduous, slow and difficult task replete with obstacles, an approach that engages key local stakeholders, is based on a reflexive process iterating between data collection and action and can harness the power of existing feminist networks with top-management commitment, has proven to be a powerful catalyst in igniting the structural change process.

With the availability of targeted support and resources, real advances can be made and experiences shared and documented, thus creating a butterfly effect that recalibrates the complex landscape towards a greater gender equality in research organisations throughout Europe and beyond.

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