

Change in research and in higher education institutions: forms of resistance in a research-action project

Reformas en la investigación y en las instituciones de educación superior: formas de resistencia en un proyecto de investigación-acción

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Abstract:

Introduction: Funded under the Horizon 2020 programme, the CHANGE project –Challenging Gender (In)Equality in Science and Research– aims to create and implement tailor-made gender equality plans (GEPs) in research performing organisations (RPOs). To make GEPs more sustainable, efforts are being made to stimulate institutional cultural change towards gender equal work environments and foster the gender dimension and inclusive research and innovation programmes in research funding organisations (RFOs) as well. The promotion of a gender equality culture is thus a key requirement for RPOs to maximise their potential. The CHANGE consortium is composed of seven institutions from six countries –Austria, Germany, Portugal, Slovenia, Slovakia, and Israel– of which five are GEP implementing partners and two are experienced partners (one coordinator and one internal evaluator).

Objectives and Methodology: This paper approaches the methodology of the project and the structural and cultural challenges faced by the implementing partners so far, looking more specifically to the similarities and differences in the different national and institutional contexts.

Results and Discussion: In all the five implementing partners organisations, successful steps have been taken in the implementation of GEPs. Regardless of these first successes, even with increasing women's representation in management and decision-making positions in some specific cases, implementing partners and coordinators fear that this change may be merely circumstantial or only due and during the project duration.

Contribution: The challenges and barriers faced so far to stimulate institutional and cultural change towards gender equal work environments in RPOs are diverse. While there are important social, cultural, and institutional differences among the partner institutions, there is a great similarity in the difficulties faced in implementing GEPs. Resistances and challenges that emerge during processes of change when gender equality policies are implemented in RPOs are more transversal to different national and organisational contexts than one could expect.

Keywords: research performing/funding organisations; gender equality; knowledge-to-action gap; resistances; structural and cultural challenges.

Resumen:

Introducción: Financiado por el programa Horizonte 2020 de la Comisión Europea, el proyecto CHANGE –Desafiando la (des)igualdad de género en la ciencia y investigación –ambiciona crear e implementar planes de igualdad de género (GEP) hechos a medida en institutos de investigación (RPO). Para que los GEPs sean sostenibles, el proyecto CHANGE desea estimular el cambio cultural institucional hacia entornos de trabajo con más igualdad de género y fomentar la dimensión de género y los programas de investigación e innovación inclusivos en las organizaciones de financiación de investigación (RFOs). Promover una cultura de igualdad de género es así un requisito para que las RPO maximicen su potencial. El consorcio CHANGE está formado por siete instituciones de seis países: Austria, Alemania, Portugal, Eslovenia, Eslovaquia e Israel, donde cinco son instituciones implementadoras de los GEPs y dos son experimentadas (una coordinadora y una evaluadora interna).

Objetivos y Metodología: Este estudio aborda la metodología del proyecto y los desafíos estructurales y culturales enfrentados por las instituciones implementadoras hasta el momento, analizando, más específicamente, las similitudes y diferencias en los diferentes contextos nacionales y organizacionales.

Resultados y discusión: En las cinco instituciones implementadoras se han dado pasos exitosos en la implementación de los GEP. Independientemente de estos logros, incluso el aumento de mujeres en puestos de dirección y toma de decisión en algunos casos específicos, tanto las instituciones implementadoras como las experimentadas temen que estas reformas sean meramente circunstanciales o debido y durante la duración del proyecto.

Originalidad de la contribución: Los desafíos y obstáculos enfrentados hasta ahora para estimular el cambio institucional y cultural hacia entornos laborales con igualdad de género en las RPOs son diversos. Existen importantes diferencias sociales, culturales e institucionales entre las instituciones, pero también hay una gran similitud en las dificultades enfrentadas en la implementación de los GEPs. Las resistencias y desafíos que surgen durante los procesos de reforma cuando se implementan marcos y políticas de igualdad de género en las RPO son más transversales a los diferentes contextos nacionales y organizacionales de lo que cabría esperar.

Palabras clave: institutos de investigación; igualdad de género; brecha entre el conocimiento y la acción; resistencias; desafíos estructurales y culturales.

1. Introduction

Gender equality is one of the seventeen Sustainable Development Goals set by the United Nations General Assembly in 2015 and intended to be achieved by the year 2030, as part of the United Nations 2030 Agenda (UNDP – United Nations Development Programme, 2019; Miotto, Polo López and Rom Rodríguez, 2019). In this domain, when compared with other regions in the globe, Europe, notably Northern Europe, has been classified as the ‘promised land’ of gender equality, especially in the education sector (Antonioni and Apergi 2019; EIGE 2019; Husu, 2000; Matarranz and Ramírez, 2018). Possible explanations for this relate to the steps that have been taken at the European, national and/or institutional level “to foster scientific excellence by fully utilising gender diversity and equality and avoiding an indefensible waste of talent” (COM, 2019). An important step towards the promotion of a gender equality culture in Higher Education Institutions (HEIs) and RPOs lies in the creation of the European Research Area (ERA), as the European Union stipulated targets to increase women participation in industrial research and technology and to significantly increase the number of women in leading positions. In this sense, gender equality within the ERA encompasses gender balance in research teams at all levels, gender balance in decision-making, and the integration of the gender dimension in the content of research and innovation proposals and procedures. Since gender equality and gender mainstreaming in research has been identified as one of the key priorities for the ERA and a key

requirement for HEIs to maximise their potential, specific funding was assigned to researchers to promote gender equality in HEI. Along these efforts, several projects have been approved to design and implement Gender Equality Plans (GEPs) in HEIs and RPOs, with many European organisations taking initiatives to develop and implement GEPs.

Despite evidence of positive results of GEPs implementation (Dahmen-Adkins, Karner and Thaler, 2019; de Villota and Vázquez-Cupeiro, 2016; O'Connor, 2019a), there are also difficulties and risks in implementing these plans (COM, 2020) as there are barriers and resistance when trying to implement human resources practices that aim for more gender equal and more inclusive working environments (de Villota and Vázquez-Cupeiro, 2016; Pastor, Serret and Pontón, 2014). Nilsen *et al.* (2016) referred to four main forms of resistance to co-creation and implementation: 1) organizational, 2) cultural, 3) technological and 4) ethical which emerge from a variety of perceived threats such as: fear of change, fear of losing power or control and fear of losing moral or professional integrity. As Bleijenbergh (2018) puts it, resistance can be understood as stakeholders' defence of the organizational identity when research highlights and threatens gendered organizational norms, beliefs, and values. Therefore, in the attempt to assimilate changes, it is reasonable to identify the sources of resistances thus adjusting suitable good practices to mitigate them. Nevertheless, it should be noted that resistance and opposition to gender equality policies have been a relatively new problem in Europe (O'Connor, 2019b; Verloo, 2018), while simultaneously, the reasons for resistance towards gender equality initiatives are not fully studied or understood. There is evidence, however, that some of the reasons for resistance tend to have a more individual basis while others a more institutional one. While the former are linked, for example, with 'sensitivities and risks', 'status quo', 'personal traits', etc., the latter are more related with, for example, available resources and/or the (in)existence of a gendered agenda (O'Connor, 2019b).

The aim of this paper is to expose the experience of the implementation of a GEP in the implementing institutions of the Challenging Gender (In)Equality in Science and Research (CHANGE) consortium, reflecting specifically on the structural and cultural challenges faced by the implementing partners so far, looking to the similarities and differences among different institutional contexts. This reflection is based on the handbook produced by the FESTA project (Sağlame *et al.*, 2016) –a similar FP7 funded project initiative. FESTA stands for the acronym of Female Empowerment in Science and Technology Academia, and it will be analysed further.

2. Methodology

In this section, the methodology applied in the CHANGE project will be explained so that the different institutional realities –and therefore, the different barriers and/or incidents faced along the implementation of the project (so far) –can be put in perspective. The analysis of the resistance experience of the CHANGE project presented here is based on the data collection (mapping) of the experiences registered by the implementing institutions, which, in turn, followed the structure presented by the sister project FESTA (Sağlame *et al.*, 2016). Data collection emerged from document analysis, interviews to key institutional actors, workshops and training sessions; and meetings with middle and top management actors.

The CHANGE project¹ aims to create and implement tailor-made GEPs in RPOs. Simultaneously, it intends to stimulate institutional cultural change towards gender equal work environments and foster the importance of the gender dimension inclusive research and innovation programmes in RFOs². An important aspect for CHANGE is the inclusion of the results and experiences of previous European projects with similar objectives for achieving structural change in research institutions towards gender equal work environments.

The motive behind the methodology of the project is the research-to-practice, respectively the knowledge-to-action gaps (Dahmen-Adkins, Karner and Thaler, 2019; Straus, Tetroe and

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² For more details on the project design consult Dahmen-Adkins, Karner & Thaler (2019).

Graham, 2009). These gaps are intended to be closed by integrating relevant actors and stakeholders from the beginning, and co-producing knowledge on gender equality together, to come up with practical knowledge. The involvement of key actors – called Transfer Agents (TAs) – within each organisation will, together with the core consortium partners, transmit co-produced gender equality knowledge inside the partner institutions (Dahmen-Adkins, Karner and Thaler, 2019). This approach aims to ensure the promotion and sustainable institutionalisation of the GEPs beyond the project duration, which is four years. The CHANGE consortium is composed of seven institutions from six countries (Austria, Germany, Portugal, Slovenia, Slovakia, and Israel), of which five are implementing partners and two are experienced partners (one coordinator and one internal evaluator), who have already implemented GEPs in previous projects.

The participating organisations differ from each other in the institution type (higher education institution and research organisations) and in their main focus (from Social Sciences and Humanities to STEM). The following institutions are HEIs: RWTH (Germany), UAVR (Portugal), UNIZA (Slovakia), BBC (Israel) and IFZ (Austria). IFAM (Germany) and NIB (Slovenia) are research organisations (cf. table 1).

Table 1 – The consortium organisations of the CHANGE project according to their type, institutional context and role.

Higher Education Institutions (HEIs)	Research Organisations (RPOs)	Implementing partners (IP) / Coordinators (Co) / Evaluator (E)
RWTH (RWTH Aachen Technical University, Germany) RWTH is a public research university, and the largest technical university in Germany. It enrolls more than 45,000 students in 144 study programs.		E
UAVR (University of Aveiro, Portugal). The UAVR was created in 1973 and it is considered one of the most dynamic and innovative universities in Portugal. It is a public foundation under private law, and has about 14,000 students in undergraduate and graduate programmes.		IP
UNIZA (University of Žilina, Slovakia) UNIZA was established in 1953 and is the only university located in the northwest region of Slovakia. Core areas of expertise are in transport and technical fields as well as in management, marketing or humanities.		IP
BBC (Beit Berl Academic College, Israel) BBC is one of Israel's oldest and largest public colleges (founded in 1971), is a multidisciplinary and multicultural leading academic institution in the areas of education, society, and the arts. There is a majority of women (about 70%) both in staff members and in students, and the President is a woman as well.		IP

	IFZ (Interdisciplinary Research Centre for Technology, Work and Culture, Austria) IFZ was founded in 1988 aiming to address technology as a social process and to integrate social issues into engineering studies. The prime objective of IFZ today is to contribute to socially and environmentally sound, sustainable and gender-equitable technology design.	Co
	IFAM (Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM, Germany) IFAM was founded in 1968 and it is one of the most important research institutions in Europe for adhesive bonding technology, surfaces, shaping and functional materials. It employs more than 600 employees from 23 departments.	IP
	NIB (National Institute of Biology, Slovenia) NIB was established in 1960 and is the largest independent public research institution for life sciences in Slovenia. It employs about 170 employees and the core activity of NIB is in the fields of biotechnology, biophysics, biomedicine and system biology.	IP

Source: authors

The general methodological approach of CHANGE is built upon a condensed version of John P. Kotter's change management model (1995), which he developed based on his practical experience in consultancy work with organisations. Kotter's model consists of eight consecutive steps (Peterson and Dahmen, 2018, 41): "1) Creating a sense of urgency about the changes needed. 2) Building a coalition within the organization. 3) Forming a strategic vision and initiatives about the changes. 4) Enlisting volunteers that are committed to the change. 5) Enabling action by removing barriers. 6) Generating short term wins. 7) Sustaining acceleration. 8) Instituting change." Kotter further assigned these eight steps to three phases, which can be translated into 'setting the stage for institutional change', which implies creating a climate for change (steps 1-3), 'empowerment and inclusion to implement change' (steps 4-6), engaging and enabling the organization for change, and finally 'sustaining and embedding the new culture', aiming to "making the change stick" (steps 7 and 8).

However, the CHANGE model, which was inspired by Kotter's approach, was reduced from 8 steps to 5 due to the limited project-funded timeframe: 1) Institutional gender benchmarking and awareness raising; 2) Feedback and planning; 3) Quick action; 4) Strategic action and 5) Sustainability and knowledge transfer.

The first step –Institutional gender benchmarking and awareness raising –was based both on quantitative and qualitative data. In the qualitative method and qualitative phenomenological research, the researcher tries to understand the interviewee's personal experience, feelings, and interpretation of reality (Creswell, 2007). In the framework of CHANGE, 64 interviews were conducted to key actors of each of the implementing partners between August and September 2018 (35 female and 29 male). Interviews were conducted by members of the national CHANGE teams to key institutional actors and target groups identified as valuable sources of information since they could participate and help to promote activities under the project, providing feedback on the results and progress as well. These key actors include elements of the decision-making

bodies and individuals such as the rector/director, dean(s), head(s) of departments, human resource managers, career service, gender equality or diversity officer (when existent and available), heads of research units, president of the scientific/pedagogical councils, gender scholars, trade union's/work association's representatives, ombudsperson and also other individuals with a potentially strong message (e.g. representatives from PhD students, young researchers that have received prizes for their scientific work). Nine individuals were interviewed at UAVR (6 women, 3 men); 18 at UNIZA (5 women, 13 men); 17 at NIB (15 women, 2 men); 12 at IFAM (6 women, 6 men); and 8 at BBC (3 women, 5 men). A content analysis of the major themes in the interviews, conducted by the interviewers, revealed the fundamentals of resistances but also enabled the planning of tailor-made GEPs for each of the institutions to raise awareness. Further resistances were more evident as the implementation of the GEPs progressed and institutional structures and cultures were thus more challenged by them.

During the feedback and planning stage, it should be mentioned that most respondents gave suggestions that were included in the GEP revisions and are also being considered for the finalization of tailor-made GEPs. The first and second stages of the project feed the third (quick action), the fourth (strategic action) and fifth (sustainability and knowledge transfer) steps. Participants' feedback needed careful planning of activities, as well as the definition of measurable that (will) help to monitor the GEP execution and achieve the sustainability of CHANGE. Interviews were also specifically useful for defining quick and strategic actions as during this process it became apparent that one needs to introduce gender knowledge into the organisations, to raise awareness, and to reduce gender myths and unconscious bias (Rotter *et al.*, 2018).

The CHANGE project is thus very much based on the co-production of knowledge and on building communities of practice among RPOs in each implementing country, ensuring a spill-over effect of the project CHANGE results. One of its results are policy papers based on this strategic stakeholder involvement, and their subsequent implementation, aiming at closing the theory-to-practice gap (Dahmen-Adkins *et al.*, 2019). Thus, it is aimed that the project can contribute to stimulating institutional cultural change towards gender equal work environments in RPOs and fostering the importance of gender dimension, inclusive research and innovation programmes in RFOs. However, success has not been attained without setbacks and barriers. Based on the FESTA project (Sağlame *et al.*, 2016), the following section discusses these setbacks from the perspective of the implementing institutions.

3. Mapping of CHANGERS' Resistance Experiences

Resistance is a well-known phenomenon in change processes, and particularly in those aiming for gender equality. Institutional resistance is defined by Carol Agócs (1997) as the 'patterns of organizational behaviour that decision makers or people in power positions employ to actively or passively deny, reject and refuse to implement, repress or even dismantle gender equality change proposals and initiatives' (cf. Agócs, 1997, 918). Different empirical studies have been identifying specific mechanisms of resistance as the disbelief about gender data and refusal to learn from a feminist (Lombardo and Merfaert, 2013); refusing to take responsibility, blaming the disadvantaged group, and arguing that there are more pressing priorities (Agócs, 1997); and relying on "the cult of individual merit" (Verge *et al.*, 2018, 96). Comparative studies also reveal that resistance to gender equality initiatives often involves the mechanism of decoupling, particularly evidence in the split between formal institutional structure and the informal values, norms, and collegial practices (Ljungholm, 2017; Peterson *et al.*, 2021; Verge *et al.*, 2018).

Another important source of information in resistance to change in institutional processes to promote gender equality is the handbook on resistance to gender equality in academia (Sağlame *et al.*, 2016). This handbook compiles the consortium experiences regarding the resistance faced throughout the project in four main dimensions, which roughly correspond to the three stages of the project, encapsulating different themes (cf. table 2). Following this handbook, a similar file with the quantitative and qualitative data collected and analysed so far was filled by the teams of the CHANGE project. Table 2 documents the "resistance episodes" of the CHANGE project and their relevance according to the consortium's institutions.

In this study, the first 3 stages –i) start-up/initiation; ii) data collection; and iii) execution/implementation –will be approached in a more general way, trying to highlight differences and commonalities among the institutions. The authors apply the three stages model to provide structure and comparability to the topic of resistance towards gender equality in implementing institutions, and to reflect the dynamics of changing attitudes and different issues occurred in particular project phases. However, there are no strict border lines among the three dimensions and in some cases resistances overlap and are transversal to the different phases of the project. Nevertheless, as much as possible, resistances along these phases will be highlighted.

Table 2 - Mapping CHANGERs' resistance experiences based on the analysis provided by FESTA

Start up/Initiation [Relevant in Organisations]	Data Collection [Relevant in Organisations]	Execution/Implementation [Relevant in Organisations]	Additional experiences from CHANGERs [Relevant in Organisations]
No funding for gender equality work NIB; UAVR; UNIZA	Standing in front of an “All is well” wall BBC; UAVR; UNIZA	Shooting the messenger BBC; NIB; UAVR	Fear of genderism, Image of objector of the traditional values UNIZA
Women are not born for science UAVR	Resistance to reflect one's own role NIB; UNIZA; UAVR	Refusal to engage with a gender equality project NIB; UAVR	Women are especially gifted for admin project work UNIZA; NIB
Introduce gender to high-level management BBC; NIB; UAVR; UNIZA	Delicate matter of sharing information – e.g. salaries BBC; NIB	Science is an elite sport UAVR	Confusing of the process/system Criticism with the criticism of the people UNIZA; NIB
Resistance to EU projects (none)	No need to hide hostility UNIZA	Women uncomfortable with gender UAVR; UNIZA	Fear to become the CHANGER (team member, ambassador for gender equality) NIB
Fear of feminism ALL	Not all women cooperate NIB; UAVR	When there's no benefit NIB; UNIZA	Convince people that any type of actions are needed NIB
	Resistance from academic council NIB; UNIZA	Lack of interest/Resistance to learn about gender NIB; UAVR	Low interest in workshops from the highest management level NIB
	Negativism and low interest about gender equality ALL	Lack of commitment to gender equality work NIB; UAVR	Passive resistance, minimal cooperation, making initiative “fade away” BBC; NIB
	Resistance to a CHANGER NIB; UAVR	Resistance from women NIB; UAVR	Fear of being exposed BBC; NIB
	Objections from a female researcher NIB; UAVR	Convince people that on-the-job actions are needed IFAM; NIB; UAVR	
		Silence speaks NIB	
		Resistance from new head of department NIB	
		Low interest in workshops	

		BBC; NIB; IFAM; UAVR	
		Mismatch of gender policy and gender reality NIB	

Source: authors

3.1 The Start up/Initiation stage

At the initiation stage of the project, the implementing partners did not find barriers to the implementation and/or even acceptance of the project. Quite the opposite in fact, with institutions reporting a positive environment, as for example the Portuguese HEI (UAVR). This should not come as a surprise, as usually, the initiation phase is less problematic than the more advanced phases of implementation, especially those involving commitment.

In this first stage, the authors firstly highlight the “fear of feminism” theme, as it underlies the whole project’s stages and it penetrates the *environment* of change, facilitating or hindering it, as it will be evidenced throughout this study. Furthermore, the “fear of feminism” is common in all dimensions of the project framework (e.g. “Negativism and low interest about gender equality” on the Data collection stage, or even “Shooting the messenger”; “Lack of interest/resistance to learning about gender” and/or “Lack of commitment to gender equality work” on the Execution/Implementation Stage). The gender “label” carries in itself a kind of disadvantageous, invisible barrier. UNIZA has reported besides a ‘fear of feminism’ even a ‘fear of genderism’ which results from the negative attitude of the society towards gender equality, presented to be in a contradiction with the traditional values of the society, mostly with the so-called “traditional family”.

In terms of funding, also similar trends are visible among the implementing partners: unfortunately, for all the implementing institutions, except for IFAM, the sole funding for gender equality measures comes directly from the framework of the CHANGE project, which means that once the 4 years of the project are finished, there will not be more funding to continue the activities. Additionally, there is also the idea that the funding used on gender equality activities is seen as “an unnecessary waste of resources” as perceived by some key institutional interviewees in NIB (Slovenia). Possible solutions for this scenario relate to the expectations of the project itself, i.e. the project will demonstrate that gender equality “is a topic in which the university needs to invest in” (UAVR, in Portugal), and therefore should be added to the work agenda of the human resources units of the different organisations (UNIZA). This would promote a fertile environment for more discussion and/or activities on these matters, shedding light on the national government for funding HEIs, RPOs, and RFOs according to their gender policy implementation. This bottom-up approach from RPOs to RFOs is seen in Slovakia as well, where RFOs lack, in most of the cases, basic information on gender equality. Among the consortium partners, it should be mentioned that the UAVR is the only institution of the CHANGE project that has the Rector and a Vice-Rector as TAs. As such, this, in principle, would smooth the processes of introducing gender issues and the project to the high-level management –one of the aspects that has been facing, so far, greater resistance, from all the institutions, except from UAVR. However, even if it was easy to schedule meetings at the initial stages, when a more proactive role was needed to define and accomplish specific actions, the initial enthusiasm faded away. The responsible project team had to implement actions such as the adoption of another TA, a senior researcher who works in the agency for the assessment and accreditation of higher education institutions.

For other institutions (BBC, NIB and UNIZA), the ‘curve of enthusiasm’ did not change much. In other words, all the researchers found it challenging (yet possible) to schedule meetings with senior management to present the project and discuss gender issues related to the organisation. These people often presented themselves as “too busy” for this kind of issues, which are considered a “non-priority” and often labelled as “easy science” (NIB). When, eventually, meetings took place, the time allocated for these discussions was often too short, signalling a lack of interest and subsequent importance attributed to these matters. The ways found by the

consortium teams to tackle this resistance varied from keep on bringing up the issue, searching for ‘windows of opportunities’ to present the subject in the framework of other organisational meetings, “have good personal relationship with key persons who control the schedule and ask them to invite us and/or to include this topic in the agenda of certain meetings” (BBC team); to explain the broader benefits of engaging in gender equality topics, namely the engagement with policy makers and the benefits that very likely this commitment might bring (NIB). Other attempts to introduce the topic to the institution’s high level management involved the Rector, namely by asking Deans’ cooperation regarding interviews scheduling, and employees’ training in managerial positions to “let them clearly see the added value of the project and topic”. This resulted in the completely smooth process of interview scheduling (UNIZA). This example also highlights the fact that resistances from the particular phases are overlapping. Resistance from the side of the high level management has been reported as an *initial phase* resistance; however, interviews were part of the data collection.

The Israeli team is the one who identified a more positive –yet “complex”– scenario with respect to feminism. Gender is regarded as one of many aspects of the organisation’s diversity, and often not the most “problematic” one, since it is a feminine-dominated institution, with a majority of women both among students and staff members. In fact, the intersection of multi-identities (e.g. the case of women of minority groups, as, for example, black women – cf. Crenshaw, 1989) is an especially important aspect to bear in mind in BBC, which is a kind of microcosm of the Israeli diverse society, where women and men of several ethnic/cultural/religious/socio-economic groups learn and work side by side. The work of the Israeli team so far signals that in some cases women with multi-identities tend to identify themselves more with their ethnic group than their “gender group”, because pertaining to an ethnic minority group is more visible or challenging. This attitude and behaviour are therefore reflected in the institutional level as well, with more emphasis attributed to minority groups (men and women) and less to the gender equality issue.

The panoply of solutions that CHANGE members applied varied from strategies such as communicating the project avoiding ‘gender’ and focus more on diversity and inclusion (UAVR); addressing feminism in a broader perspective of diversity and multiculturalism, while emphasising the positive aspects about the institution (BBC) compared to other RPOs in Israel or around the world (e.g. the fact that there is a majority of women in the staff and a woman President, etc.); building the reputation of CHANGERS not as fighters but as partners, showing more valuable perspectives for individuals and the institutions; etc. In sum, a common finding in the five implementing institutions is the fact that ‘gender’, in general, has a negative connotation, and –even if HEIs are considered ‘gender neutral’ (Aiston and Jung, 2015; Husu, 2013; Husu and Morley, 2000), there is a strong resistance to feminism. Additionally, quite often, women involved in the study of these themes are labelled or associated with erroneous and belittling stereotypes. At the UAVR, for example, it was stated that there are no traditions of implementing GEPs in the country nor in the university as there is a dominant belief in meritocracy and in the gender neutrality of HEIs.

3.2 Data Collection Steps

With respect to the second main dimension related to data collection, the barrier labelled as “Standing in front of an ‘All is well’ wall” is the theme where one finds more common scenarios. The BBC team reported that people understand the gender gaps in general, and even the gender gaps at the national level. However, once specific data on the organisation is presented, people seem to feel uncomfortable when realising that, despite the majority of women in the academic staff, their percentage in senior positions is still relatively low. The institution thus shares common gender biases or gaps like other RPOs in Israel. During the interviews at UNIZA, some of the respondents stated that the low percentage of the female professors naturally copies the lower percentage of female researchers and teachers in technical fields and therefore “all is well, we can not change this situation”. Somehow in similar lines, although admitting that there are imbalances and inequalities at the national level, at the Portuguese institution (UAVR), for example, people have a very positive and optimistic perspective on gender equality within the

university –even when the numbers reveal the existence of vertical segregation and a low percentage of women in managerial positions. Simultaneously, arguments are advanced to justify these phenomena based on external factors, as for example, social and cultural traditions. There is a common discourse “favouring” or associated with strong meritocracy; even when the data on the low percentage of women in managerial positions are presented, this is seen as a problem on the women’s side –as they are not interested in assuming these roles or not skilled enough– and therefore, one stands “in front of an ‘all is well’ wall”, reinforced by the belief that it is only a matter of time for women to dominate top positions and perform a more active role in decision-making processes. The UAVR team attempted to shed light on other countries’ practices by presenting examples of initiatives that were taken. However, the BBC team presented quantitative and qualitative empiric data on BBC to deliver the message in the organisational ‘scientific language’ to establish trust and credibility between the team and the audience and to attain legitimacy and support to implement the suggested GEPs. On this, it should be highlighted the authors’ common understanding on these situations: especially in academic or research-oriented organisations, to base one’s plans and organisational recommendations on empiric data, since it is part of the organisational ‘language’ or ‘culture’. By performing as such, better communication, trust and cooperation from all organisational levels is established and support enhanced. In this sense, it is important to establish good and friendly work relationships with the people responsible for the institution’s data in order for them to be helpful in providing data and assist with additional requests (as evidenced by the BBC team). This certainly will help in the point related to the (delicate) matter of sharing information, considering that all teams faced difficulties in collecting complete data about salaries, employment contracts and promotion processes. An exception, however, was experienced by the BBC team as they faced full cooperation and collaboration from their colleagues and seniors, although data on salaries was more challenging to obtain. This resistance is explained by the fact that BBC is a relatively small institution, where most academic staff members are familiar with each other, and therefore, privacy is very difficult to maintain when data is collected and disaggregated, i.e. it is possible to guess the person behind the figures quite easily.

A common experience identified by the Portuguese, Israeli and Slovenian teams was the difficulty to get women to openly report their personal experience of achieving the role they perform in the institution, especially when they are in decision-making positions. Quite often, they wanted to portray the image of the “gender neutral institution”, either because they prefer to believe in that or because they fear to be wrongly quoted or misinterpreted. These behaviours are very much linked to the “not all women cooperate” and the “fear of being exposed” topics, as some women did not cooperate with the interviews nor were they willing to talk about these issues or were willing to talk providing full anonymity (NIB, BBC and UAVR).

Another form of women resistance (or reluctance) was identified as a barrier to the “research track paradigm” or “rules of the academic game”. Based on the survey on work-life balance conducted in BBC and the feedback received so far with respect to the gender workshops, some of the resistances from women are directed at the academic promotion procedures (or “rules of the academic game”, or the institutional paradigm). This aspect is prominent in BBC, which used to be a teacher training college under the supervision of the Ministry of Education in the past, but recently has become an academic college under the supervision and budgeting of the Council for Higher Education (CHE). As a result of this shift the institution is now requested to adapt to research-universities criteria for academic promotion yet with insufficient research resources as provided in universities, such as less teaching hours or adequate funding for staff members who perform research. Consequently, many female academic members –as most of the academic staff working at BBC– (but also in other implementing organisations such as the UAVR and UNIZA) are facing a ‘glass ceiling’ of promotion due to lack of sufficient academic publications or grants, although they perceive their professional competencies in another scale altogether (whether teaching, clinical practice or the arts) (in a similar view, cf. Aiston and Jung, 2015). Those women find projects like CHANGE irrelevant for them, since they think the project is about enabling them to enter the research track –which they do not strive for – but rather a

change in the institutional paradigm of academic promotion³. They seek institutional acknowledgement and merit based on their practical expertise and accomplishments, as well as their academic teaching and managerial contribution, and not only, or mainly, on their research achievements and outputs, which, in many cases, will be less than their university peers. Those women reinforce the aim of the BBC team to not just expand gender diversity within the research track, but also to enable diversity of personal choice, and diversity of several academic tracks in academia. In other words, the institutions should allow for academic staff members the choice between research-oriented tracks and other alternative professional tracks, such as teaching, clinical practice or arts, which could be relevant to engineering or other applied sciences as well. Those other alternative academic tracks should be equivalent to the ‘classic research tracks’ with respect to professional acknowledgment and merit, career progression and promotion, job security, etc.

3.3 Execution/Implementation Phase

The third dimension refers to the execution/implementation stage where several barriers and uncomfortable situations can be reported. Mostly, these resistances underlie issues related to the fact that gender equality is neither considered as a “science topic”, nor an “important issue”. In the academia, as the low percentage of women in top-management positions is not considered an issue and there is the general idea that “all is well” and that “science is an elite sport”, women want to be seen as capable academics, that have reached their position due to merit and not (only) due to their sex (e.g. UNIZA). The main feeling is that women have to be prepared for academia as it is: hard work and only those who are able to deal with this ‘elite sport’ and pressure can be hired, promoted and/or advance in their careers (e.g. UAVR). Moreover, some female interviewees even state that if they managed to do a career, without any support, other interested women in pursuing scientific careers will also make it, if they really want it and strive for it, and therefore, they do not need any kind of support. These discourses are dangerous in themselves as they evidence no interest in learning about such topics, with interviewees or other key actors not available for talking and discussing important measures to improve the working environment.

According to the project consortium, the lack of interest and/or participation in CHANGE activities is due to the work overload, remitting gender issues to the last place of the agenda and list of concerns. Again, these are scenarios where the involvement of TAs (as the UAVR) is of paramount importance –not only to pass the message, but to enforce gender equality (and inclusion) as an important theme in academia which needs to be addressed and incorporated in the institutional culture.

An interesting and also important theme is the “mismatch of gender policy and gender reality”. For the NIB team, for example, strategic documents in the institution set specific targets and goals but there is no one to control or to be accountable in case of inconsistencies or/and when targets are not accomplished. Neither of the other institutions have these kinds of documents.

In sum, by analysing evidences of all the implementing partners in the CHANGE project, it was possible to identify the existence of four different types of resistances which are independent from the institutional and/or national contexts: 1) fear of feminism; 2) assumption of gender neutrality in HEIs and a dominant discourse on excellence and merit; 3) devaluing of knowledge on gender equality; and 4) lack of institutional or personal support. The identification of these types of resistance adds to the existent literature on these matters since it reinforces the existence of mechanisms of resistance as the disbelief about gender data and refusal to learn from a feminist (Lombardo and Merfaert, 2013) or “the cult of individual merit” (Verge *et al.*, 2018, 96). However, or, in addition to that, it also reveals how a dominant cultural cognitive framework of HEIs based on the hegemony of such values as excellence and merit, along with the fear of feminism, are important sources of resistance to change in gender equality.

³ Ultimately (and ideally), by stimulating institutional and cultural change, while simultaneously RPOs, RFOs and HEIs implement GEPs, the CHANGE project intends to change the academic and scientific systems, leading into more equal and gender friendly paths.

4. Conclusions

In order to understand resistance to gender equality and to the implementation of GEPs in academics and scientific settings, national and organisational contexts have been considered along this study. Both contexts influence, constrain and shape each other as demonstrated with the cases of Portugal and Slovakia (RPOs' activities shedding light on the RFOs), on the case of Germany in the form of alignment with mandatory gender equality policies required by the national/regional level from the HEIs and RPOs (so called Implementation Agreement on the GWK Agreement on Equality between Women and Men in Joint Research Funding) or in Israel in applying research-universities criteria for academic promotion at colleges, for example.

In this paper, an attempt was made to illustrate different institutional settings located in different parts of the world to assess commonalities and differences in the barriers and resistances faced, and in the solutions and methodologies presented by the consortium partners regarding gender equality and GEPs. Despite the differences on the level of institutions and countries, it was possible to identify the existence of four different types of resistances which are independent from the institutional and/or national contexts: fear of feminism; assumption of HEIs as gender neutral and the presence of dominant discourses on excellence and merit; devaluing knowledge on gender equality; and lack of institutional or personal support.

Being an action-research project, CHANGE has been adopting differentiated methods and strategies to involve the academic community in the pursuit of a more gender equal and inclusive environment, as for example the involvement of key actors –TAs– within each organisation to ensure the promotion and sustainable institutionalisation of the GEPs beyond the project duration. In each partner institution the TAs have quite different characteristics, both concerning professional background and positional power, empowering or weakening the success of the project. Their role is especially important considering that affirmative actions and/or policies tend to be inexistent in HEIs and RPOs, and, as the results of this study evidence, the discourse on gender equality is undervalued and regarded as a threat to the culture of excellence, meritocracy and even to scientific work. Other strategies implemented by implementing partners was the institutional benchmarking and quick GEP activities, e.g. workshops and training sessions, to raise awareness at the institutional level.

With respect to the stages involving the institutionalisation of a GEP, the CHANGE consortium partners identified a common path: initial stages seem to be smooth in what concerns the project acceptance, also because this is a (prestigious) H2020 funded project and because academicians will most likely regard themselves as liberal and pluralistic. However, as time goes by and more proactive roles and commitment are needed to implement (gradual) change, and consequently, the fully institutionalisation of the GEP, institutions tend to lose 'enthusiasm' and back off. There is thus a common curve of involvement regardless of national and/or organisational contexts.

Other commonalities –as well as specificities– were found at the stage of data collection. Barriers varied between getting women to openly talk about their experiences in terms of career progression in their organisations, to the challenge of obtaining reliable, gender disaggregated data on every legal and institutional staff arrangement, e.g. salaries. The systematic design and collection of gender-disaggregated data are essential to knowing the institution's reality to implement effective and evidence-based GEPs as well as other types of practices and guidelines. Resistance comes thus also in the form of silence from those in the institutions who have the power to 'enforce' change. In this sense, a more active involvement of the TAs, especially in putting the topic of gender equality in their agendas, was/is considered determinant for the success of GEPs implementation. Considering that the CHANGE project is still ongoing, it is not yet possible to assess how the resistance(s) identified and strategies to cope with these so far, will mirror (in) the project's success. However, the results of this research reinforce that, regardless of the context in which the GEPs are being implemented and the specificities of each partner, resistance is a common problem that occurs at all stages of implementation of the GEPs i.e., while trying to change. In fact, this is an important and complex issue that must be properly addressed to evaluate the GEPs success. To comparatively evaluate the impact of resistance on the outcomes of the project is also one of our future research objectives.

Looking back to the beginning of the project –where gender issues were rarely or positively talked about in the organisations– and putting in perspective efforts and measures taken by implementing partners, it is possible to look at the future with some optimism regarding the contribution and involvement of these institutions in the construction of more gender friendly working environments. Without changing or implementing any guideline or prescriptive norm, and by overcoming institutional and cultural barriers, a change in awareness and willingness to address this issue, both on the institutional and on the personal levels, has been achieved with a growing involvement of the institutions– even if the greater barrier continues to be the (low and sometimes pejorative) value and importance attributed to such topics. In fact, any perceptual and organisational change takes time, and therefore those resistances are a good sign of a paradigmatic shift –although a slow one. They also signal the challenges that should be addressed in our actions, and therefore to be more precise and focused in our efforts. The authors believe that the very discourse about this topic is a game-changer at the institutional level: discourse provides language, and language creates awareness, which in turn will create action and visible change in the future.

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