The impact of the COVID-19 pandemic on institutional change processes and the collective capabilities of higher education and research institutions

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Abstract

The COVID-19 pandemic and the public policies adopted to cope with the ensuing crisis had a significant impact on higher education and research institutions, and this captured the attention of numerous scholars. However, most of the analyses, especially those adopting a gender perspective, have focused on the impact of the pandemic on women as individuals (individual capabilities), while little attention has been paid to the impact on institutions and processes of structural change (collective capabilities). The capabilities approach (CA) is useful for analysing gender inequalities in higher education, and has also been used to examine the impact of the crisis on certain groups and situations. Based on the adaptation of this approach by Robeyns (2003) and Baser and Morgan (2008) to emphasise the importance of collective capabilities for individuals, institutions and society at large, this paper examines the institutional impact of the pandemic by drawing from the experiences of the six institutions in the GEARING-Roles project implementing gender equality plans (GEPs). To this end, we combine desk research of secondary sources with qualitative analysis of in-depth interviews with representatives of the GEP implementers and observations of project meetings carried out between April 2020 and June 2022. Our findings indicate a considerable impact on the collective capabilities of the change agents in the participating institutions, which stem mainly from a lack of institutional commitment to the gender equality agenda, mobility restrictions and limited social relations. However, some positive elements also emerge, such as the teams' exceptional capacity to adapt to adverse circumstances.

Keywords: gender equality; structural change; universities; European Union; pandemic

Resumen. *El impacto de la pandemia de COVID-19 en los procesos de cambio institucional y las capacidades colectivas de las instituciones de educación superior e investigación*

La pandemia de COVID-19 y las políticas públicas adoptadas para hacer frente a la crisis subsiguiente tuvieron un impacto significativo en las instituciones de enseñanza superior (ES) y de investigación, lo que captó la atención de numerosos estudiosos. Sin embargo, la mayoría de estos análisis, especialmente los que adoptan una perspectiva de género, se han centrado en el impacto sobre las mujeres como individuos (capacidades individuales) y han prestado poca atención al impacto sobre las instituciones y los procesos de cambio estructural (capacidades colectivas). El enfoque de las capacidades (CA) es útil para analizar las desigualdades de género en la ES y también para examinar el impacto de la crisis en determinados grupos y situaciones. Partiendo de la adaptación de este enfoque de Robeyns (2003) y de Baser y Morgan (2008) para subrayar la importancia de las capacidades colectivas para los individuos, las instituciones y la sociedad en general, este artículo examina el impacto institucional de la pandemia basándose en la experiencia de seis instituciones implementadoras de los planes de igualdad de género (GEP) en el proyecto GEARING-Roles. Para ello, combinamos la investigación de fuentes secundarias con el análisis cualitativo de entrevistas en profundidad realizadas a representantes de estas entidades y observaciones de reuniones del proyecto llevadas a cabo entre abril de 2020 y junio de 2022. Nuestros hallazgos indican un impacto considerable en las capacidades colectivas de los agentes de cambio de las instituciones participantes, que derivan principalmente de la falta de compromiso institucional con la agenda de igualdad de género, las restricciones de movilidad y las limitadas relaciones sociales. No obstante, también emergen algunos elementos positivos, como la excepcional capacidad de los equipos para adaptarse a circunstancias adversas.

Palabras clave: igualdad de género; cambio estructural; universidades; Unión Europea; pandemia

1. Introduction

The COVID-19 pandemic has had an undeniable impact on higher education institutions. In a short space of time, universities and research centres had to adapt their activity to an online environment and adjust to new scenarios and educational models. The crisis did not affect women and men equally, and this must be addressed so that the efforts made by public institutions and universities in favour of equality over the last few decades do not become undone.

There is clear evidence of the impact that lockdown and remote working had on women in universities. For example, several studies show that the

scientific productivity of women during the crisis was seriously affected (Frederickson 2020; Vincent-Lamarre et al., 2020; Wiegand et al., 2020; Dolan & Lawless 2020; Alon et al., 2020), with a notable decrease in the number of articles with women as sole authors submitted for publication, and a general decrease in the participation of women in collective articles across all disciplines. This results in less visibility given to research by women compared with research by men (Diario Público, 2020). Several factors can explain this differential impact on female academics, including their load of caregiving and family-related responsibilities on top of most of the so-called domestic work in universities (Heijstra et al., 2017), which includes student care, tutoring and supervision. Moreover, male academics are more likely to have a partner who does not work outside the home, while their female colleagues, especially those in the natural sciences, are more likely to have an academic partner (Schiebinger et al., 2008). Even in dual-career households, evidence shows that women do more housework than men (Molly King, cited by Viglioni, 2020).

This situation may contribute to a further widening of the gender gap in science, making it more important than ever to reinforce and sustain actions to advance equality in these organisations. Given the urgency of managing the challenges faced by universities and research centres in dealing with the pandemic, the design, approval and implementation of gender equality plans (GEPs) in these institutions have been seriously affected. However, most research on the impact of the pandemic has ignored the collective and institutional impact that COVID-19, lockdown and the measures associated with management of the pandemic have had on implementation of GEPs and institutional equality policies.

The capabilities approach (CA), originally developed by Amartya Sen (1999) and later by Martha Nussbaum (2000) for the field of economics, is a useful tool for analysing gender inequalities in higher education institutions (Unterhalter 2007; Robeyns 2006; Boni & Walker, 2013) and has also been used to examine the impact of the crisis on certain groups and situations, such as humanitarian contexts (López Belloso & Mendía Azkue, 2009). Baser and Morgan (2008) adapted it to emphasise the importance of collective capabilities for the development of individuals, institutions and society at large. Several studies have used CA to analyse the situation of gender equality in the context of higher education (Aristizábal et al., 2010; Córdoba 2006) and some researchers have deployed it to analyse the impact of COVID-19 (Simon et al., 2020; Meili et al., 2022), since it provides an adequate and coherent framework for measuring quality of life while accounting for the multiple effects of the pandemic. Other authors have analysed the implications of the pandemic itself for the CA and have considered the predominance of some capabilities over others (primacy of life and health over other capabilities) (Manley 2020). The contribution that the CA makes by giving education a central role is particularly relevant since it helps to clarify institutional impact and the collective capabilities of higher education institutions and thus helps to anticipate how the pandemic will impact the equality agenda in the European Research and Education Area in the medium and long term.

This paper aims to examine the institutional impact of the pandemic at the six institutions in the GEARING-Roles project[1] implementing GEPs. For this purpose, we combine documentary analysis of secondary sources with a qualitative analysis of in-depth interviews conducted with representatives of the GEP implementers to determine how the pandemic has affected collective capabilities and institutional change.

This paper is structured into three main sections: the first presents the application of the CA to gender equality and higher education and research institutions; next, we explore the impact of the pandemic on implementation of GEPs at the institutions in the GEARING-Roles project, and the resultant effects on the capability of their working groups to continue promoting change in their organisations during the crisis; lastly, we explain how the project consortium and structural change community contributed towards sustaining progress on the GEPs during the pandemic, and suggest possible ways in which the CA could be used to harness institutional resilience in times of crisis, as well as to inform and implement public policies on research and innovation.

2. Theoretical framework: Application of the capabilities approach to gender equality and higher education and research institutions

The theoretical proposal of the CA developed by authors such as Amartya Sen and Martha Nussbaum represented a turning point in development approaches during the 20th century and acquired wide dissemination that has been reflected in a broad set of theoretical discussions and political proposals (Dubois, 2008), including educational policies. Its interest stems from the fact that, apart from being a theoretical proposal aimed at reversing poverty, it assigns education a central role (Córdoba, 2006). For Sen, education functions as a catalyst for the acquisition of other capabilities, understood as the real and current opportunity that people have to make informed decisions such that they guarantee themselves a life and activities that they have reason to value (Sen, 1999). Once achieved, these capabilities take the form of what Sen calls "functionings" or "the various things that a person can value doing or being" (Sen, 1999, 75). As such, the CA aspires to well-being beyond economic well-being. It is not based solely on income or consumption, but argues that resources create opportunities rather than constitute an end in themselves, and therefore it attributes an instrumental dimension to education (Aristizábal et al., 2010; Córdoba, 2006).

Nussbaum's contribution is linked to a social justice dimension. Her addition is directly linked to the usefulness of this approach as an evaluative fra-

1.   GEARING-Roles is part of the European Commission's commitment to promote structural change processes and the equality agenda in research. To this end, GEPs have become a key tool. For more information on gender policies in research and the implementation of equality plans, please visit the DG Research and Innovation website. For information on the project and on the institutions implementing the GEPs and the texts of the GEPs, see the project webpage.

mework for gender equality, since she criticises Sen for lacking definitions, thus weakening the evaluative potential of the CA (Dubois, 2008). Nussbaum revises the concepts of functionings and capabilities to make them more concrete, proposing a simpler interpretation of them and a defined list of capabilities that incorporate social virtues (Nussbaum, 2002: 120-123).

Nussbaum specified her proposal in ten key capabilities, including life, bodily health, bodily integrity, senses, imagination and thought, emotions, practical reason, affiliation, relation with other species, play, and control over one's environment (political and material) (Nussbaum, 2007: 23).

Bozalek and Dison (2013) apply the CA to teaching and learning in higher education, and understand that the purpose of its application in this domain is to provide opportunities for both students and teachers to progress academically and to assess what is meaningful for this progress. They distinguish three categories of conversion factors, defined by Robeyns as "the ability of the individual to translate resources into desired functionings" (Robeyns, 2011, cited by Bozalek & Dison, 2013: 385): personal or internal factors such as prior teaching experience and academic literacy; social conversion factors such as educational policies and power relations (gender, race, class); and environmental conversion factors such as facilities, location or environment (Bozalek & Dison, 2013: 385). Loots and Walker (2016: 262) advocate methodological approaches based on the CA h to address equality (or inequality) in higher education as a means of making it possible to go beyond numerical analyses, and to incorporate social structures, which maintain gender norms, as well as individual factors, interpersonal comparisons and complex conversion factors. They state that "gender equality would include the availability of opportunities for development for both genders, while also taking into account social and institutional structures as conversion factors which demand equity interventions" (Loots & Walker, 2016: 262). This view resonates with Robeyns, since it advocates analysis of existing policies and power inequalities at institutions, and posits that these may be structural (2011).

A significant contribution made by Robeyns (2011) is her definition of how the CA can be used as a normative framework in higher education, with normative frameworks being directly related to policy frameworks and goals (Walker, 2010: 488), namely to assess and evaluate (1) individual well-being; (2) social arrangements; and (3) social interventions, including social policies.

The role that the CA assigns to education contrasts with the current trend towards academic capitalism, in which the influence of the so-called "knowledge-based economy" paradigm calls on education and research "to meet the human capital needs of a changing labour market and economy, provide infrastructure and services to businesses, and transfer knowledge so that it contributes to capital accumulation" (Jessop, 2018). Furthermore, academic capitalism suggests that actors in the higher education environments, such as students, faculty and researchers, become enterprising bearers of intellectual capital.

This neoliberalisation of higher education is of concern to authors such as Walker who defend the application of the CA in the education sector,

with an emphasis on human development, agency, well-being and freedom, to ask a different set of questions about education, since it offers a "compelling and assertive counterweight to dominant neoliberal interpretations of human capital in education as something that only serves economic productivity and employment, and asks instead what education enables us to do and be" (Walker, 2006: 164).

Thus, in a context in which the crisis caused by COVID-19 highlighted the need to strengthen public policies and the capacity for collective action, the CA is an appropriate tool for analysing institutional responses. For the matter under consideration (equality policies in higher education), this approach can help to measure not only the impact that the crisis had on the individual capabilities of female academics, but also on the equality agenda of university institutions, which is the purpose of this article.

2.1. Suitability of the capabilities approach for analysing the impact of COVID-19 on the gender equality agenda in higher education institutions

The pandemic has highlighted the weaknesses in welfare systems, not only because of the challenges posed by the pandemic itself, but also through the public policies and measures adopted by countries to cope with the crisis (Biggeri, 2020). The CA can help us understand the impact of the pandemic on well-being, but also works as a critical frame to the dominant approaches, by questioning the impact of some of the measures adopted (Venkatapuram, 2020). Some authors, such as Venkatapuram, focus on analysis of specific capabilities such as health, while Anand et al. claim that the CA can help us understand some of the main policy responses by highlighting the importance of public deliberation and demonstrating the value of awareness of or sensitivity to a wide range of concerns within society (Anand et al., 2020). These authors list some of the capability deprivations that have been documented in the media or by researchers which address capabilities related to the home, places of work, community, the physical environment and access to services. This list shows that the impact of COVID-19 is profound but also broad, and affects all aspects of life. Thus Anand et al. argue that the CA is particularly useful as a structure that fits with empirical data and experiences as well as with theoretical criteria, and helps to identify what is needed for recovery.

Furthermore, the implications of the analysis of the pandemic on the approach itself have been highlighted (Manley, 2020). Manley argues that the pandemic reaffirms "the centrality of bodily health and life capabilities in Nussbaum's list of capabilities, as well as the importance of publicly available health care" (2020: 288). On the other hand, in his view, the pandemic has shown that, when faced with a threat, individuals are willing to allow, or even demand, adoption of certain drastic measures (such as lockdowns) that diminish many individual and collective capabilities for the sake of protecting certain capabilities. He points out that cultural differences have substantially affected perception of these measures, which are

more readily accepted in some countries than others. Thus Manley suggests a new (collective) capability: resilience. He argues that the lack of resilience in public welfare systems has translated into an additional cost in the agency of individuals (2020).

This impact of the pandemic on the CA model emphasises one of its most quoted weaknesses, namely its predominant individualism as opposed to a broader approach that also considers collective capabilities. We argue that a collective CA can help to determine the impact of the pandemic on the European higher education equality agenda.

2.2. Main critiques of the capabilities approach: from individual to collective capabilities

An important point of critique of the CA is its individualistic approach (Ibrahim, 2006; Stewart, 2005; Comim & Kuklys, 2002; Evans, 2002, Comim & Carey, 2001). Robeyns structures the main criticisms around three main issues: (1) individualistic bias; (2) scant attention to groups; and (3) limited attention to social structures (Robeyns, 2005: 107). She acknowledges some of the criticisms made and incorporates them into her proposal.

A complement to this theoretical framework has been developed in response to criticism of the CA. It is based on collective capabilities, defined as "those capabilities exercised by a group – or more generally by a collective subject – that acts to secure a capability for the members of that group" (Robeyns, 2017: 116). Baser and Morgan (2008: 25) define collective capability as "the collective ability or capability of a system or organisation to carry out a particular function or process, within or outside the system."

For the purpose of incorporating a review of the CA from the perspective of collective capacities, for this article we consider the proposals made by Robeyns and Dubois in their reviews of Baser and Morgan's proposal on collective capabilities. Despite being *a priori* individual capabilities, given that she considers the limitations of the individualistic bias of the approach, Robeyns' list for the evaluation of equality processes in the post-industrial societies of the West is nevertheless relevant to our analysis.

Our analysis of the capabilities proposed by Robeyns begins with the differentiation made by Alkire (2005) between evaluative and prospective applications of the CA: an evaluative analysis focuses on which capabilities are expanded, for whom and to what extent; a prospective analysis focuses on how and why capabilities are expanded. Our initial hypothesis is that even though both individual and collective capabilities have been impacted, the impact on the latter is directly linked to institutional commitment towards gender equality, and could harness policies on gender equality.

Baser and Morgan's discussion of collective capabilities, as reviewed by Dubois, is relevant from an institutional point of view since they enable an organisation to do things and sustain itself (Dubois, 2019). Baser and Morgan identify five concrete collective capabilities: 1) commitment and attraction;

2) performing logistical tasks or functions, offering services and techniques; 3) relating and obtaining support and resources; 4) adapting and renewing itself; and 5) balancing coherence with diversity.

Thus, the theoretical framework chosen for analysis of the impact of COVID-19 on equality policies and structural change processes combines approaches based on human capability (Robeyns) and organisational capability (Baser and Morgan), since structural change processes are based both on institutional commitment and stakes, and on the agents of change (people) who promote, drive and sustain them.

With regard to analysis of the available institutional capabilities for mitigating the impact of the pandemic, we find the combination of both elements of the CA interesting: on the one hand, (a selection from) the defined list of capabilities in Robeyns' extended version, since it explicitly and consistently incorporates gender equality into this conceptual framework and because it incorporates an extended interpretation of the CA itself that includes social structures and attention to different groups; and on the other hand, the institutional approach provided by the five collective capabilities described by Baser and Morgan. The combination of both approaches to the CA allows us to analyse institutional impact from the perspective of the specific aspects contained in Robeyns' list (more closely linked to change agents), but also from Baser and Morgan's procedural perspective (institutional change).

2.3. Assessing the impact on the gender equality agenda and structural change: personal and institutional collective capabilities

Ingrid Robeyns has explored application of the CA in depth and proposes five criteria for selecting the capabilities employed for evaluative use (Robeyns, 2003: 70-71): (1) explicit formulation; (2) methodological justification; (3) context sensitivity; (4) different levels of generality; (5) exhaustion and non-reduction.

If we consider that context plays a key role in the CA and its implementation, Robeyns emphasises the importance of social structures and groups that affect individual capabilities and that these, in turn, are influenced by political frameworks. Thus, the political equality agenda, especially in the case of Europe, has played a fundamental role. However, while we acknowledge the importance of the policy and normative context, our focus is on the actions and initiatives that have been or could have been implemented at institutional level.

When Robeyns reviews the individualism of the CA, she argues that Sen's ethical individualism that permeates the CA places individuals/people at the centre of moral concern. Moreover, as Dubois points out, the CA introduces the social approach through two avenues: recognition of social and environmental factors; and prioritisation of capabilities over functionings in the assessment (Dubois, 2019). The 14 capabilities proposed by Robeyns are listed in Table 1.

Table 1. Robeyns' list of capabilities

1. Life and physical health: being able to be physically healthy and enjoy a life of normal length.
2. Mental well-being: being able to be mentally healthy.
3. Bodily integrity and safety: being able to be protected from violence of any sort.
4. Social relations: being part of social networks and giving and receiving social support.
5. Political empowerment: being able to participate in and have a fair share of influence on political decision-making.
6. Education and knowledge: being able to be educated and to use and produce knowledge.
7. Domestic work and nonmarket care: being able to raise children and take care of others.
8. Paid work and other projects: being able to work in the labour market or to undertake projects, including artistic ones.
9. Shelter and environment: being able to be sheltered and to live in a safe and pleasant environment.
10. Mobility: being able to be mobile.
11. Leisure activities: being able to engage in leisure activities.
12. Time-autonomy: being able to exercise autonomy in allocating one's time.
13. Respect: being able to be respected and treated with dignity.
14. Religion: being able to choose to live or not to live according to a religion.

Source: Robeyns, 2003: 71-72

As noted above, we build on Alkire's (2005) understanding of evaluative and prospective applications of the CA, whereby an evaluative analysis focuses on which capabilities are expanded, for whom and to what extent; whereas a prospective analysis focuses on how and why capabilities are expanded. For our analysis, it is helpful to determine which of the 14 capabilities suggested by Robeyns have been affected by the pandemic (not all 14 apply to higher education institutions) and which have not.

At the same time, Baser and Morgan's collective capabilities, as reviewed by Dubois, are relevant from an institutional point of view, since they enable an organisation to do things and sustain itself (Dubois, 2019). Baser and Morgan propose five concrete collective capabilities, as summarised in Table 2.

In the section on methodology below, we describe how the human capabilities (Robeyns, 2003) were merged with the organisational approach (Baser & Morgan) and translated into interview questions.

Table 2. Baser and Morgan's proposal of collective capabilities

1. Commitment and attraction.
2. Performing logistical tasks or functions, offering services and techniques.
3. Relating and obtaining support and resources.
4. Adapting and renewing itself.
5. Balancing coherence with diversity.

Source: Dubois, 2019:41

3. Methodology

We adopted a qualitative methodology in the form of semi-structured in-depth interviews and observation techniques. Specifically, interviews were conducted with eight representatives of the six GEARING-Roles institutions implementing GEPs and one representative of the evaluating partner. Also, participant and non-participant observations were carried out during project meetings and events held by the partner institutions between April 2020 and June 2022. With the exception of one event in mid-2022, observations were conducted online, since COVID-19 enforced limits on international travel and project meetings, so events were organised remotely during this period.

Within the scope of GEARING-Roles, the GEPs under analysis were designed, implemented, monitored and evaluated at six academic institutions across different countries: five research-performing organisations located in Portugal, Spain, Slovenia, Turkey and the United Kingdom; and one Estonian research-funding organisation. With the exception of the partners in Spain and the UK, who did have previous experience of implementing GEPs or consistent change initiatives, the GEPs represent the first ever experience of implementation of a GEP for the organisations that were observed. While the six plans have minimum common intervention areas, as self-tailored documents adapted to their specific contextual and institutional settings, there are differences between them in terms of structure and content, and in the different priorities at each institution they address. In this paper, the similarities and differences between the GEPs that were observed are not considered, because, according to the data that was collected, these did not affect how institutions managed the COVID-19 crisis in terms of gender.

For confidentiality purposes, throughout the discussions in this paper the institutions are named numerically, and direct references to names of institutions, departments, cities and countries have been removed from quotes.

During the research design phase, we drew up a list of questions combining seven of the 14 individual capabilities proposed by Robeyns and Baser and Morgan's lists of core collective capabilities (see Table 3). We selected seven of

Table 3. Combination of CA perspectives to measure the institutional impact of COVID-19 in GEARING-Roles partners implementing GEPs

Capabilities selected from Robeyns' list	Analysis from the collective/institutional perspective
Life and physical health	**Commitment and attraction** What measures taken by institutions demonstrate their commitment to protecting the health of higher education institutions' academic/institutional communities?
	Performing logistical tasks or functions, offering services and techniques What services did institutions provide to protect staff?
	Relating and obtaining support and resources Did institutions create/implement health-support mechanisms?
	Adapting and renewing itself; and, balancing coherence with diversity Did institutions take diversity into account when defining measures to promote health? Are those measures sustainable?

Table 3. Combination of CA perspectives to measure the institutional impact of COVID-19 in GEARING-Roles partners implementing GEPs

Capabilities selected from Robeyns' list	Analysis from the collective/institutional perspective
Mental well-being	**Commitment and attraction** Did institutions concern themselves with the mental health of staff? Did they commit to staff mental well-being? **Performing logistical tasks or functions, offering services and techniques** What services did institutions promote to protect the mental well-being of staff? **Relating and obtaining support and resources** Did institutions create/implement mental health support mechanisms? **Adapting and renewing itself; and, balancing coherence with diversity** Did institutions take diversity into account when defining measures to promote mental well-being? Are those measures sustainable?
Social relations	**Commitment and attraction** Did institutions commit to maintaining and sustaining staff social relations? **Performing logistical tasks or functions, offering services and techniques** Did institutions offer any services/measures for promoting social relations? **Relating and obtaining support and resources** Did institutions formally or informally promote social interactions? **Adapting and renewing itself; and, balancing coherence with diversity** Did institutions endure social inclusion and diversity?
Education and Knowledge	**Commitment and attraction** Did institutions commit to keeping teaching and research activities active? **Performing logistical tasks or functions, offering services and techniques** What measures were taken by institutions to keep academic activities in place? **Relating and obtaining support and resources** Did institutions provide material conditions and other relevant resources for sustaining academic work? **Adapting and renewing itself; and, balancing coherence with diversity** Did institutions consider diversity when taking measures?
Domestic work and non-market care	**Commitment and attraction** Did institutions establish measures to promote a fair work-life balance (WLB)? **Performing logistical tasks or functions, offering services and techniques** What services did institutions offer (if any) to promote a WLB and fair distribution of care work? **Relating and obtaining support and resources** Did institutions they formally or informally promote a WLB? **Adapting and renewing itself; and, balancing coherence with diversity** Did institutions consider diversity when defining WLB measures?
Mobility	**Commitment and attraction** What was the institutions' policy regarding mobility? **Performing logistical tasks or functions, offering services and techniques** Did institutions provide researchers affected by mobility restrictions with alternatives? **Relating and obtaining support and resources** Did institutions offer mobility support? **Adapting and renewing itself; and, balancing coherence with diversity** Was mobility available to everyone?
Time autonomy	**Commitment and attraction** Did institutions commit to employees' autonomy and to their right to disconnect? **Performing logistical tasks or functions, offering services and techniques** Did institutions offer mechanisms for managing time spent working? **Relating and obtaining support and resources** Did institutions provide employees with support for timing self-management? **Adapting and renewing itself; and, balancing coherence with diversity** Did institutions take diversity into account when considering time autonomy issues during the pandemic?

Source: self elaboration

the 14 capabilities listed by Robeyns using the five criteria she suggested and, in particular, those with a specific formulation that best fits the context that was examined and that are adapted to the methodology we used. This combination enables us to examine the adequacy of the CA for determining the gendered institutional impact of the pandemic, since the focus on collective capabilities facilitates assessment of its critical function and its capacity to create collective awareness from a solid theoretical base, and to identify the institutionalisation and consolidation of the processes of structural change (Dubois, 2008: 7).

4. Findings

The initial timeframe for the GEARING-Roles project (2019-2022) was seriously affected by the COVID-19 pandemic and the political measures that were adopted. When the pandemic was officially declared and the first lockdowns and restriction measures were implemented, most of the GEPs were in the approval phase just after completion of institutional diagnosis. Although the original plan was to develop in-person mutual learning activities and co-creative training with stakeholders from the GEP-implementing institutions during that period, these were seriously affected by restrictions to international mobility and closure of institutional premises. As the crisis evolved, implementation of the GEPs began in a context in which social interactions were restrained and all the institutions were working entirely remotely or on a hybrid basis. As the respondent from Institution 5 said: "Basically, the whole GEP is a pandemic GEP."

If promoting structural change in traditional institutional settings is challenging due to resistances to institutional change, it is particularly tough in times of crisis. In a group of six institutions implementing gender equality plans, the capacity of the different GEP implementing task forces was limited by partners that were newcomers to the process of structural change, the lack of physical contact, the shift in institutional priorities, and the additional burden generated by the pandemic on all academic and administrative activities. This impact was highlighted by all institutions, and Institution 1's statement describes the general context well:

> In the context of a pandemic, in which the university had to face significant challenges, such as moving all activities online, guaranteeing access to education and ensuring that all sectors would remain active, everything related to the equality agenda gets pushed into the background [...] Suddenly, equality policies stop being a priority, stop being important, and there is a legitimation of this backlash. (Institution 1)

4.1. Mobility

Mobility restrictions were identified by all participating institutions as one of the elements that affected performance of the GEP task forces and activities most.

In the first phase of the project, the consortium members met in person at the annual conference (November 2019) and at in-person mutual learning and pairing events. As Institution 2 stressed, these initial face-to-face meetings helped the partners to establish a cohesive manner of working and to build up a team identity, which contributed towards the consortium's later adaptation to an entirely online environment during lockdown. While the cancellation of face-to-face meetings seriously affected mutual learning meetings and co-creation events, the shift to an online environment provided the partners with the option of new settings for working and communicating, which resulted in positive results for the consortium as a whole, as noted by Institutions 2 and 5:

> At this phase of the project, we have all these international workshops, pairing events and things like that. If pairing events are physical, only a couple of people can go, or for an annual conference, for instance, only a couple of people can attend. But when it was made available to more people, more people could join. (Institution 2).

> Before the pandemic, we did not have regular meetings with each other. We had these trips where we met each other, but after the pandemic started, we started to have these bimonthly meetings in which we could see everybody face-to-face, even if it was just through Zoom or other ways. At first, it seemed that after the pandemic [outbreak] we saw the project partners more than before. (Institution 5).

While this new online reality resulted in positive effects at consortium level, the scenario at institutional level was far more complex. Overall, GEPIs reported that the lack of physical contact had negative implications for the entire GEP process. Closure of the institutions' facilities and national lockdowns impacted institutional agendas and the priority assigned to gender equality. The lack of physical interaction hindered definition of GEP actions, approval of plans and leverage of institutional commitment. Moreover, participation and engagement of diverse stakeholders in implementation of the plans, as well as more subjective aspects of GEP implementation such as dealing with resistance, were also stalled:

> We have not returned to work in person, there is no one there [at the institution] […]. There is a lack of ownership and identification with the organisation and colleagues. (Institution 3)

> If we were working face-to-face, it would have been easier to include more people, to be more active in this process, but because of Zoom fatigue and so on, it was harder to get people involved and quite often people said: I would join this event if it was not online. (Institution 5)

> The main impact, especially in the first period, was a lot of difficulties in getting access to the organisational stakeholders […], how difficult it became to talk to people in corridors, to understand the atmosphere in a room and to see where the resistances were. (Institution 7)

These difficulties affected the institutions' capacity for engagement and attractiveness, limiting their collective capability for change. Therefore, these constituted conversion factors for GEPIs.

Despite the additional difficulties with regards to implementing gender equality initiatives at institutional level during the pandemic, some partners also reported some benefits, particularly those related to performing logistical tasks or functions. For example, some institutions reported advantages and benefits of remote working for the task forces:

> For instance, the [Gender Equality Department] has not come back to physical work, although most units at the university have. More people have moved out of town now, they cannot afford to live in [city X] now because rent prices have gone up. So, distance remote work has worked beautifully and the [Gender Equality Department] has grown enormously and is incredibly effective with this kind of distance work. (Institution 2)

> We have a lot of foreign students who, rather than having to stay here for the entire degree, can go back home when they need to, because it is not always easy to stay here in Europe alone. (Institution 6)

4.2. Social relations

The consequences of the pandemic on social relations, both at consortium and institutional level, are directly linked to mobility restrictions. Firstly, the aforementioned sense of community created during the first few months of the project contributed towards keeping informal spaces alive during running of the consortium when face-to-face meetings were no longer possible. While it cannot be denied that the decrease in in-person meetings limited the consortium's capacity for mutual support and exchange beyond formal lines, the experience of the GEARING-Roles project has also shown that informal connections and alternative means of building trust relationships are viable. In this regard, respondents from all institutions stressed the attention the consortium paid to sustaining a space for informal exchanges in online meetings to ensure that receptiveness to listening to the personal needs of the team and providing continuous mutual support was sustained.

> We expected it would have been a very social process in the beginning, when there is a lot of information exchange also in casual environments, not just in official meetings, but the pandemic meant that there was much less connection to people and everything we did was mostly via videoconferences, adding a different mood to this whole thing. (Institution 5)

At institutional level, all respondents referred to the significant impact of the online environment and a limited ability to attract resources for the GEPs and to support the work of the task forces. Nevertheless, as Institution 7 recalls, despite these difficulties, all task forces succeeded in getting access to relevant

stakeholders. Most GEPs were approved by institutional leaders in due course, and implementation of many of the actions in the different GEPs began before formal approval of documents, thanks to the task forces' capability to renew and adapt to this unforeseen context. This collective capability to adapt to new circumstances continued during implementation of GEPs. For example, Institution 2 described an interesting initiative to foster engagement and participation among diverse stakeholders:

> We tried to get more people on board, as much as possible, and at some point, we thought it was a better strategy to have individual meetings or smaller meetings. Thematic meetings with different people, for instance, to talk about research, to talk about curriculum, really helped. People are more involved and they become more active when it is their field of study or work.

Even though this initiative meant investing additional time and resources, it succeeded in engaging diverse actors. It is worth noting, however, that this investment was a task force initiative and not proof of institutional commitment to gender equality.

4.3. Education and knowledge

Universities and higher education institutions faced significant challenges, with little room for manoeuvre when confronted with the measures imposed by governments. This included guaranteeing the security of the university community, the quality of teaching and equal opportunities. Institutions were forced to train their teachers, maintain student care, increase their technological infrastructure to overcome obstacles and ensure that student training and other substantive processes did not come to a halt. (CRUE, 2020: 8).

At the same time, as noted above, within the GEARING-Roles project, restrictions on in-person consortium meetings directly impacted how knowledge exchange activities were delivered. All respondents referred to the differences between using co-creative and participatory techniques in face-to-face and online training.

> The whole set of mutual learning was under pressure as well. Mutual learning is more complicated when you do it online than when you meet physically. The most sensitive issues are discussed during the breaks, at the coffee table. (Institution 7)

Given the complexity of change processes, the role of the consortium as a knowledge exchange community was crucial. Although partners commonly believe that certain exchanges can only take place in face-to-face meetings, overall, adapting to the online format also brought positive results. Respondents stated that the solution devised by the consortium of holding online meetings more frequently to compensate for the lack of physical contact meant that they were able to keep more up to date with the change processes in the

different GEP implementing institutions. This enabled them to learn from their peers' experiences and guide each other in similar situations. Moreover, respondents also drew attention to the fact that, since meetings and training workshops were held online, more people from the task forces were able to participate regularly:

> If [the meetings and training workshops] had not been online, we would not have had such detailed knowledge of what our colleagues were experiencing in their GEPs. We were constantly learning from each other. (Institution 6)

> A positive consequence was maybe getting more access to information because we tended to be online and share more. (Institution 7)

Use of digital tools was essential to keeping these activities going. In this regard, respondents also referred to the pandemic as an opportunity to adapt to alternative ways of working online without neglecting creativity and fluidity.

> The digital tools indeed give us the chance to maintain training and meetings, which had an exponential impact that physical meetings do not have. (...) in a very short time, we became professional and learned a lot of techniques. (Institution 1)

At institutional level, meanwhile, the task forces faced issues convincing institutional actors to participate in training and get involved in the gender equality training initiatives provided for them in the GEPs. In this regard, Institutions 2, 3 and 6 expressed particular difficulties getting institutional actors involved in the training sessions on offer in the project, due to shifting priorities in the organisations; and Institution 6 reported that institutional members were particularly resistant to using the online format for gender equality training.

Despite this, respondents also reported aspects of the online format that ended up triggering positive results for women, especially students:

> Acceptance by the institution of an online format for activities facilitates support in thesis orientations, helps people who need to work to fund their studies, people who live outside the city and abroad [...]. And I think it has had a positive effect on women. [...] They were working but kindergartens were still closed, so we could connect via Zoom and do classes in a hybrid format. (Institution 6)

Likewise, at Institution 2, the Gender Equality Unit noted the fact that a significant number of people from the staff and student communities were seriously affected by the economic crisis caused by the pandemic, and moved from metropolitan areas to live far away from the campus. In this context, adaptation of the main activities to a hybrid format was a means of ensuring that this new situation did not prevent certain groups from participating in

academic projects, training initiatives and regular teaching activities, and therefore allowed the institution to adapt and promote diversity in GEP implementation.

With regard to online teaching, one of the institutions implementing GEPs noted that, even though the institution did not adopt a gender perspective in its organisation of compulsory online teaching, teaching staff did notice a difference in behaviour of female and male students (Institution 1). Female students were perceived as more active and participative in online classes, while male students were more active in face-to-face classes. This was especially true in knowledge areas in which female students constituted the majority of students in the group but were less active in class. This reflection resulted in a shared task group discussion about class management that was then included in an institutional guideline.

4.4. Time autonomy

While digitalisation meant that activities could continue, the additional burden on academic and administrative tasks linked to the pandemic was mentioned by all respondents as a salient factor that hindered smooth execution of project and GEP actions, limiting their collective capability to perform logistical tasks and offer services.

> Compared with in-person meetings, we all have a great deal more work to do when organising everything via Zoom. It is the case with all activities, not only within the project or in the GEP. […] It is much more work than when we were on the faculty premises all the time. So people do not have, let's say, "free time" for other activities. (Institution 1)

> In the second part of the pandemic, the problem became time […]. Right now we are so stressed, we have to be available all the time, on the screen, through the phone, having these back-to-back meetings, so many more meetings that are taking place […]. The kinds of, for instance, co-creative workshops that we organised before the pandemic, we cannot find time for such events, now everything has to be condensed […] we are all overworked, everyone is, all the administrators, the faculty, the leadership; it is hard to have them prioritise the GEPs given this time constraint. (Institution 2)

All respondents referred to what is known as "Zoom fatigue", which affected the performance of activities in the consortium and at the institutions. Respondents expressed concerns about the dynamics of working from home and carrying out all activities online. They mentioned that being online can often be confused with always being available, and that dealing with the blurred boundaries between work and leisure hours was particularly challenging. The consortium sought to minimise such fatigue by striving to keep the agenda flexible, either by rescheduling training sessions to more favourable periods or adapting the length of sessions and break times.

In addition, respondents noted that gender equality issues were at risk of being dropped from the institutional agenda because priorities shifted to cope with the crisis and an additional burden was placed on all academic staff. Administration costs were often presented as a reason for putting GEP initiatives on hold. Moreover, all respondents reported that their institutions paid little attention to how COVID-19 disproportionately affected women and men.

Nonetheless, respondents also identified positive impacts on time autonomy. At Institution 5, for example, application processes were extended during the pandemic which – although unintentionally – ended up benefiting women with care responsibilities and underprivileged groups. At Institution 2, the respondent explained how the Gender Equality Unit was particularly mindful of how the pandemic affected different groups of people, with a view to ensuring flexibility and solidarity in operation of the unit.

4.5. Domestic work and non-market care

In close connection with the challenges generated by workload and time management, domestic and care responsibilities also impacted consortium activities and institutional scenarios. Institutions 3, 4, and 6 reported particular issues making progress with GEPs due to the decreased availability of task force members during lockdown. According to the respondents, the fact that the task forces are mainly composed of women who have young children and/or other caregiving duties limited the capacity of the task force:

> All my young colleagues, the ones that have small children, were ill in my department, in the working group as well. (Institution 4)

> Many of my colleagues in the task force were women with young children. I also have caregiving responsibilities for elderly people. You cannot expect them to perform as usual when they are closed at home. (Institution 6)

At institution level, respondents from Institutions 2, 3 and 5 stated that, even though their organisations adopted measures for staff and students to reconcile their personal and professional lives during the crisis, the measures did not consider how the pandemic impacted women and men differently in the academic context. Specifically, Institutions 2 and 5 explained that, although the organisations were quite flexible with people who have children, the measures taken in this regard were not gender-sensitive and their implementation lacked a gender perspective. While the respondents agreed that the work-life balance (WLB) measures that were adopted turned out to be particularly beneficial for women, they also pointed out that these initiatives were not deliberately designed for that purpose, and that a result such as this confirms, once again, that women are disproportionately disadvantaged in reconciling their professional and personal lives.

Institutions 1, 4 and 6, meanwhile, identified actions that adapted and renewed their traditional style of work with a more gender-sensitive and diverse perspective. At Institution 1, for instance, an analysis of work-life balance policies that were implemented *ad hoc* was carried out. Participants in this analysis stated that work-life balance measures that were implemented during the pandemic should be maintained in the long term. In other institutions, in addition to the special attention paid to people who have young children, the organisation changed internal rules that required academic staff to spend periods abroad in order to get promoted. Although the measure was taken as a means of coping with travel limitations during COVID-19, it will be maintained and replaced by a wider interpretation of international collaboration (Institution 4). As the respondent from Institution 4 noted, an approach of this kind affords caregivers and other people who do not have the option of being away for extended periods equal opportunities in career advancement.

Likewise, at Institution 6, a work group including members from the project task force was created specifically to debate issues relating to the long-term impact of the pandemic, with particular emphasis on reconciling professional and family life. Both examples demonstrate institutional commitment to keeping the spotlight on potentially distinct consequences suffered by different groups following the pandemic.

4.6. Mental well-being

The mental well-being of consortium partners and task force members became a major concern during the pandemic. In addition to the overall concern and uncertainty caused by the health crisis, the lack of in-person contact through which to share experiences and receive support, plus the additional workload and the need to adapt to new working modalities in a short period of time, affected people's mental health. Respondents mentioned that, despite the significant challenges, the fact that they perceived the attention and empathy of their peers during difficult times helped them to maintain enthusiasm, optimism and resilience among the consortium and task forces.

At institutional level, the concern shown by institutions implementing GEPs regarding a gender perspective in measures designed to address the mental health issues of staff and students during the pandemic was uneven. At Institution 5, for instance, risk assessments on working from home were organised but did not apply a gender lens. Nonetheless, these assessments remain in place following the end of the pandemic. At Institution 2 the Gender Equality Unit was invited to participate in the initial discussions to create a document on how to make life more comfortable during lockdown. The respondent noted, however, that the document that was released does not perceive differences in the consequences of working from home between women or men, especially those who have children.

4.7. Life and physical health

During the pandemic, life and physical health were a primary concern. The GEARING-Roles task forces suffered from periods when several of their members were on sick leave simultaneously. This was the case at Institutions 4 and 7. To deal with this, the teams redistributed tasks among their members and the consortium negotiated for deadlines to be extended.

Institutionally, all organisations adhered to national policies on lockdown and remote working, as well as to general restrictions such as mandatory use of facemasks and limitations on social interaction. Some of the institutions, such as Institution 1, adapted teaching schedules to avoid congregating large groups and to maintain social bubbles, and most of them adopted a hybrid format for meetings and lectures as a means of keeping activities going. However, none of the respondents declared that a gender perspective was taken into account when defining health policies. At Institution 1, for example, weekly newsletters were distributed through internal communication networks to inform employees and students about the health of the academic community (i.e. the number of infections and deaths) and alert them to the risks of face-to-face activities and ways to prevent infection. Nonetheless, the information was not disaggregated by sex or any other intersecting category:

> The university has been issuing periodic data when contagion at student and faculty level has been at its highest, but there has been no sex-disaggregated data. (Institution 1)

In other institutions, such as Institution 6, policies to deal with the pandemic had a "diversity perspective", albeit without a gender lens:

> The institution recognised the impact of the pandemic on the academic work, but with no gender perspective [...]. Concern was shown for diversities such as class, mental health conditions and economic conditions, but never gender.

5. Discussion and conclusion

We can draw two types of conclusions from the above: theoretical conclusions related to the suitability of the approach and its possible limitations; and conclusions that are more oriented towards the practices of the higher education institutions themselves.

Based on our review of the CA as an analytical framework, we argue that, although it is true that it has been modified by various authors to adapt it to specific contexts (such as higher education or the impacts of the COVID-19 pandemic), it is an appropriate framework for analysis of complex contexts in which the aim is to transcend merely quantitative approaches. Thus, the review of the CA shows that it is a useful tool for examining and identifying needs in terms of policy intervention. The critical dimension proposed by the CA aids analysis of complex processes by openly questioning the dominant

systems. For example, this critical contribution is particularly useful for addressing the dominant system of academic capitalism, characterised by prioritising economic results (such as staff productivity) over the promotion of specific capabilities. For this reason, it has already been used by authors such as Walker (2010) or Dyer et al. (2018) to question the neoliberal model.

It is precisely because of the prevailing neoliberal norm and perspective that during and after the COVID-19 pandemic, the focus has been on the impact the health crisis has had on the individual capabilities of academics. Indeed, the limited number of analyses that have been conducted in terms of gender equality in higher education institutions during and after the pandemic have focused on the impact on female academics. However, to date, there is a gap in the literature regarding analysis of the impact that the COVID-19 crisis will have on institutional equality policies and agendas in the short and medium term. The contribution we make in this paper is an initial step towards filling this gap.

Our work is based on some of the main criticisms of the CA, namely its excessive individualism and scant attention to collective capabilities. These collective capabilities are essential to sustaining and promoting equality agendas in universities and higher education institutions, and should therefore be incorporated into analysis of the impact of this and future crises. Another question that emerges in terms of the implications for the CA of analysis of the pandemic is how to differentiate the concept of capability from that of capacity. If capabilities, as defined by Sen, are "the doings and beings that people can achieve" (whereby external factors are only implicitly considered), capacities would be those that one has or does not have depending on external constraints. These factors can make a difference in the process of acquiring capabilities and functionings, since it can mean that some groups or collectives are unable to acquire these doings and beings because they do not have, for example, an adequate environment. External factors, which are considered in the CA explicitly as conversion factors, but which in Sen's interpretation also reside somehow in capabilities, deserve further disentanglement and analysis.

In this paper, we have seen how several authors (Venkatapuram, 2020; Walker, 2006; Robeyns, 2003) have focused their analyses on specific capabilities or have made lists prioritising some capabilities over others. Precisely one of the most significant impacts of the COVID-19 crisis is evident in the reinforcement of the centrality of certain capabilities over others (Manley 2020). In our opinion, adaptation of the approach itself and prioritisation of some capabilities over others is essential to its adaptation to analysis of specific contexts and fields. Specifically, we have opted to use Robeyns' list as a starting point, because it is suitable for addressing gender equality in education, and the collective capabilities proposed by Baser and Morgan (2008).

Although we use the list and the prioritisation made by Robeyns as our starting point, we understand that the circumstances and characteristics of the crisis arising from the COVID-19 pandemic demand a reorganisation of this list to address the capacity thaties that have been impacted the most, according

to our qualitative analysis. Our results show the capabilities most affected by the pandemic within the context of a GEPI project are: 1) mobility; 2) social relations; 3) education and knowledge; 4) time autonomy; 5) domestic and non-market work; 6) mental well-being; and 7) life and physical health. As we have detailed in the section on methodology, we have not deployed Robeyns' complete list, but commenced with a prioritisation of the capabilities that appeared in the in-depth interviews and observations. Moreover, the results of the analysis show that the characteristics of the crisis caused by COVID-19 and by the measures adopted during the pandemic have meant that some capabilities have been more affected than others. It is precisely as a result of the measures adopted to deal with the pandemic, which involved lockdown and transfer of most higher education institutions' activities to the online environment, that life and physical health, for example, have received less attention than mobility or social relations, since, *a priori*, this digitalisation of activity translated into a greater perception of security of life and physical health.

In terms of practical outcomes, two main conclusions can be drawn. First of all, it is evident that universities have largely ignored the gendered impacts of the pandemic in general, while even less attention has been paid to the impact on the collective capabilities of the teams in charge of steering change. According to the interviews, the institutions focused on adapting to the circumstances arising from the crisis, and paid little or no attention to the commitments made in terms of equality. All the institutions that were analysed had "pandemic GEPs", and this had an impact on both the design and approval of plans, on the implementation of actions, but above all on the task forces and researchers in charge of implementing the GEPs. The success of the six GEPs is inseparable from the effort and dedication of these groups, and the pandemic and the situation arising from it significantly affected their collective capabilities.

In all the capabilities analysed according to Robeyns' list, there was an impact on the collective capabilities for engagement and attraction, for carrying out logistical tasks or functions and offering services, and for obtaining support and resources. The impact of COVID-19 on these collective capabilities shows a lack of focus on the gendered impact of the pandemic by the institutions analysed and the consequences that this has for task forces and change agents in these organisations. The main effects of this are gender fatigue and the fact that the additional effort made by these task forces may have significant consequences for sustainability of the equality agenda. However, some of the collective capabilities were also identified as having been strengthened; particularly, the capacity to adapt and renew. All interviewees highlighted the ability of the participating task forces and researchers to adapt to an unprecedented context in which the restrictive measures that were adopted made it more difficult to exchange experiences and learn from each other than initially planned. The interviews and observations highlighted the capacity of task forces to incorporate new tools and means of achieving not only the actions within the plans but also the activities of the project. This was due mainly to mutual support, the

search for alternative ways to maintain informal spaces, and exchanges between partners about experiences, even at a distance. The lack of institutional commitment was compensated by the undeniable commitment of the task forces and consortium members to weave a coherent and diverse support network that led to the success of the GEPs and project activities.

Finally, we believe that this paper is only an initial exploration into the impact of the pandemic on the collective capabilities and equality agenda in European higher education institutions. It would be useful to extend this research by incorporating additional experiences to identify common dynamics and specificities, and to compare the impact on institutions and consortia that were newcomers to the gender equality agenda when the pandemic was declared with those of institutions and actors with a more consistent track record.

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Bibliographical references

ALON, Titan; DOEPKE, Matthias; OLMSTEAD-RUMSEY, Jane and TERTILT, Michèle (2020). "The Impact of COVID-19 on Gender Equality". *National Bureau of Economic Research*, Working Paper 26947.
https://doi.org/10.3386/w26947

ALKIRE, Sabina (2005). "Why the capability approach?". *Journal of human development,* 6 (1), 115-135.
https://doi.org/10.1080/146498805200034275

ANAND, Paul; FERRER, Bob; GAO, Qin; NOGALES, Ricardo and UNTERHALTER, Elaine (2020). "COVID-19 as a Capability Crisis: Using the Capability Framework to Understand Policy Challenges". *Journal of Human Development and Capabilities*, 21 (3), 293-299.
https://doi.org/10.1080/19452829.2020.1789079

ARISTIZÁBAL, Alejandra B.; AGUILAR, José Félix L. and WALKER, Melanie (2010). "La educación superior desde el enfoque de capacidades. Una propuesta para el debate". *REIFOP,* 13 (3), 123-131.

BASER, Heather and MORGAN, Peter (2008). *Capacity, change and performance: Study report.* Maastricht: European Centre for Development Policy Management.

BIGGERI, Mario (2020). "Capabilities and Covid-19". *Journal of Human Development and Capabilities,* 21 (3), 277-279.
https://doi.org/10.1080/19452829.2020.1790732

BONI, Alejandra and WALKER, Melanie (2013). "Introduction: Human development, capabilities and universities of the twenty-first century". In: BONI, Alejandra and WALKER, Melanie (eds.). *Human development and capabilities.* Routledge, 17-28.
https://doi.org/10.4324/9780203075081-7

BOZALEK, Vivienne and DISON, Arona (2013). "Using the human capabilities approach as a normative framework to evaluate institutional teaching and learning inter-

ventions at UWC". *South African Journal of Higher Education*, 27 (2), 383-400.
https://doi.org/10.20853/27-2-248

Comim, Flavio and Carey, F. (2001). "Social capital and the Capability Approach: are Putnam and Sen incompatible bedfellows?". Paper presented at the *EAEPE Conference 'Comparing Economic Institutions'*, 8-11 November, Siena, Italy.

Comim, Flavio and Kuklys, W. (2002). "Is poverty about poor individuals?". Paper presented at the 27th General Conference of the International Association for Research in Income and Wealth, 18-24 August, Djurhamn, Sweden.

Córdoba, Rafael C. (2006). "Desarrollo humano y capacidades. Aplicaciones de la teoría de las capacidades de Amartya Sen a la educación". *Revista Española de Pedagogía*, 64 (234), 365–380.

CRUE (2020). "La universidad frente a la pandemia: Actuaciones de Crue Universidades Españolas ante la COVID-19". Confederación de Rectores de las Universidades Españolas, Madrid.

Diario Público (2020, May 18). "La emergencia del coronavirus hace aún más invisibles a las mujeres científicas". Retrieved from: https://bityli.com/JMSwSmF

Dolan, Kathleen and Lawless, Jennifer L. (2020, April 20). "It Takes a Submission: Gendered Patterns in the Pages of AJPS". American Journal of Political Science. Retrieved from: https://ajps.org/2020/04/20/it-takes-a-submission-gendered-patterns-in-the-pages-of-ajps/

Dubois Migoya, Alfonso (2008). "El debate sobre el enfoque de las capacidades: las capacidades colectivas". *Araucaria*, 10 (20), 35-63.

— (2019). "La propuesta alternativa desde el enfoque de las capacidades conceptos y marco de análisis". In: Alberdi, J.; Casimiro, I.; Cunha, T.; Dubois, A.; Fernández, G.; Jubeto, Y. and de Pinho, L. *Territorios en conflicto. Claves para la construcción de alternativas de vida* (pp. 25-70). Gernika: Asociación de Investigación por la Paz Gernika Gogoratuz.

Dyer, Sarah; Solem, Michael; Haigh, Martin and Waddington, Shelagh (2018). "A capabilities approach to higher education: geocapabilities and implications for geography curricula". *Journal of Geography in Higher Education*, 42 (1), 7-24.
https://doi.org/10.1080/03098265.2017.1379060

Evans, Peter (2002). "Collective capabilities, culture and Amartya Sen's development as freedom". *Studies in Comparative International Development*, 37 (2), 54–60.
https://doi.org/10.1007/BF02686261

Gómez Navarro, Ángel (2013). "Ethics of human development according to the perspective of the Martha Nussbaum's capabilities". *Phainomenon*, 12 (1), 19-28.
https://doi.org/10.33539/phai.v12i1.238

Guichot Reina, Virginia (2015). "El «enfoque de las capacidades» de Martha Nussbaum y sus consecuencias educativas: hacia una pedagogía socrática y pluralista". *Teoría de la Educación. Revista Interuniversitaria*, 27 (2), 45–70.
https://doi.org/10.14201/teoredu20152724570

Heijstra, Thamar M.; Finnborg, Salome S. and Einarsdóttir, Thorgerdur (2017). "Academic career making and the double-edged role of academic housework". *Gender and Education*, 29 (6), 764-780.
https://doi.org/10.1080/09540253.2016.1171825

Ibrahim, Solava (2006). "From individual to collective capabilities: the capability approach as a conceptual framework for self help". *Journal of human development*, 7 (3), 397-416.

Jessop, Bob. (2018). "On academic capitalism". *Critical Policy Studies*, 12 (1), 104-109.
https://doi.org/10.1080/19460171.2017.1403342

Belloso, María López and Irantzu Mendia Azkue. "Local Human Development in contexts of permanent crisis: women's experiences in the Western Sahara." *JAMBA: Journal of Disaster Risk Studies*, 2 (3), 159-176.
https://doi.org/10.4102/jamba.v2i3.24

Loots, Sonja and Walker, Melanie (2016). "A capabilities-based gender equality policy for higher education: Conceptual and methodological considerations". *Journal of Human Development and Capabilities*, 17 (2), 260-277
https://doi.org/10.1080/19452829.2015.1076777

Manley, Rhys (2020). "Light at the End of the Tunnel: The Capability Approach in the Aftermath of Covid 19". *Journal of Human Development and Capabilities*, 21 (3), 287-292.
https://doi.org/10.1080/19452829.2020.1787358

Meili, Kaspar Walter; Jonsson, Håkan; Lindholm, Lars and Månsdotter, Anna (2022). "Perceived changes in capability during the COVID-19 pandemic: A Swedish cross-sectional study from June 2020". *Scandinavian Journal of Public Health*, 50 (1), 102-110.
https://doi.org/10.1177/14034948211023633

Nussbaum, Martha (2000). *Women and human development: The capabilities approach.* Cambridge: Cambridge University Press.

— (2002). *Las mujeres y el desarrollo humano. El enfoque de las capacidades.* Barcelona: Herder.

— (2007). "Human rights and human capabilities". *Harvard Human Rights Journal*, 20, 21-24.

— (2010). *Sin fines de lucro. Por qué la democracia necesita de las humanidades.* Buenos Aires: Katz Editores.

Robeyns, Ingrid (2003). "Sen's Capability Approach and gender inequality: selecting relevant Capabilities". *Feminist Economics*, 9:2-3, 61-92.
https://doi.org/10.1080/1354570022000078024

— (2005). "The capability approach: a theoretical survey". *Journal of human development*, 6 (1), 93-117
https://doi.org/10.1080/146498805200034266

— (2011). "The capability approach". *Stanford Encyclopedia of Philosophy*. Retrieved from: https://plato.stanford.edu/entries/capability-approach/

Simon, Judit; Helter, Timea M; White, Ross G.; van der Boor, Catharina and Łaszewska, Agata (2020). "Capability impacts of the Covid-19 lockdown in association with mental well-being, social connections and existing vulnerabilities: An Austrian survey study". *BMC Public Health*, 21, 1-12.
https://doi.org/10.1186/s12889-021-10351-5

Stewart, F. (2005). "Groups and capabilities". *Journal of Human Development*, 6 (2), 185–204.
https://doi.org/10.1080/14649880500120517

Subrahmanian, Ramya (2005). "Gender equality in education: Definitions and measurements". *International Journal of Educational Development*, 25 (4), 395-407.
https://doi.org/10.1016/j.ijedudev.2005.04.003

Unterhalter, Elaine (2007). "Gender equality, education, and the capability approach. Amartya Sen's capability approach and social justice in education. Gender equality, education, and the capability approach". In: Walker, Melanie and

UNTERHALTER, Elaine (eds.). *Amartya Sen's capability approach and social justice in education.* New York: Palgrave Macmillan, 87-107.

VENKATAPURAM, Sridhar (2020). "Human Capabilities and Pandemics". *Journal of Human Development and Capabilities*, 21 (3), 280-286.
https://doi.org/10.1080/19452829.2020.1786028

VIGLIONI, Giuliana (2020). "Are women publishing less during the pandemic? Here's what the data say". *Nature,* 581, 365-366.
https://doi.org/10.1038/d41586-020-01294-9

VINCENT-LAMARRE, Philippe; SUGIMOTO, Cassidy R. and LARIVIÈRE, Vincent (2020). "The decline of women's research production during the coronavirus pandemic". *Nature*, 19 May. Retrieved from: https://go.nature.com/3SyTP4L

WALKER, Melanie (2010). "A human development and capabilities 'prospective analysis' of global higher education policy". *Journal of Education Policy*, 25 (4), 485-501.
https://doi.org/10.1080/02680931003753257

— (2005). "Amartya Sen's capability approach and education". *Educational Action Research*, 13 (1), 103-110.
https://doi.org/10.1080/09650790500200279

— (2006). "Towards a capability-based theory of social justice for education policy-making". *Journal of Education Policy*, 21 (2), 163-185.
https://doi.org/10.1080/02680930500500245

WIEGAND, Krista; LISLE, Debbie; MURDIE, Amanda and SCOTT, James (2020, May 15). "Journal submissions in times of COVID-19: Is there a gender gap?". *The Duck of Minerva*. Retrieved from: https://bit.ly/3SEXnCG