

Time to PhD: Exploring the Experiences of Doctoral Students and the Persistence of Gender Bias During the Pandemic

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Abstract. This article presents the main conclusions of an exploratory study carried out in Portugal on how women doctoral students have experienced time to PhD completion during the pandemic, drawing on studies of time, gender and academia. It shall do so by carrying out an empirical analysis of data gained from a survey conducted in January 2021 made up of open-ended questions. In line with existing studies, the results reached underline that the pandemic is simultaneously perceived as an opportunity to discipline time and accelerate doctoral work, and an experience of stagnation due to lack of concentration and delay marked by difficulty in finding spare time to dedicate exclusively to researching and writing a thesis. This paper raises some ideas about the relevance of Gender Equality Plans in universities addressing the specificities of doctoral students' experience of time as they complete their degree, indicating the need for them to adopt an intersectional approach to time during and for their doctorate.

1 Introduction

Time to PhD has been a matter of great concern for individuals and higher education institutions over time (Araújo, 2005; Araújo et al., 2019). However, the COVID-19 pandemic brought with it numerous suspensions and additional challenges, significantly affecting scientists' mobility and group work, and therefore academia as a whole, impacting the time to completion of the doctorate itself.

Indeed, a PhD encompasses a typology of research projects that are highly dependent on activities that demand co-presence. These activities include not only classes, supervision and laboratory tests but also meetings, national and international mobility programmes and fieldwork conducted with other people, among other things. A PhD is also an expensive undertaking that impacts both personal and family budgets, especially when students pay independently.

Meanwhile, the COVID-19 pandemic required students and higher education institutions to readapt workspaces and manage different and sometimes conflictual time demands, including personal and family time. In sum, the COVID-19 pandemic is increasing and densifying the already high rhizomatic (Araújo, 2019; Gravett (2021) nature of time during and for PhD studies: suddenly, time and space spent working on Doctoral Projects were subjected to increasing transformations and pulverised with additional interruptions, requests, delays, uncertainties, and waits. As Gravett notes:

“The concept of rhizome and becoming can be usefully applied in order to disrupt linear narratives of learning and to enhance our understanding of the nuances, fluidity and heterogeneity of all routes of doctoral research. However newer forms of the doctorate, such as the PhD by publication, with its space for a more heterogeneous, non-hierarchical, collation of work on multiple research projects, offers particularly rich potential to surface the fluidity of doctoral study that a rhizomatic conception of knowledge represents” (Gravett, 2021, p.299).

Indeed, the COVID-19 pandemic is suspending and simultaneously demanding new time structures and arrangements, impacting institutions, PhD students' lives, and trajectories. Universities have responded with increasing extensions of deadlines. However, the difficulty in finalising theses remains a significant institutional issue.

Before the pandemic, literature on the matter had noted that doing a PhD imposes different time challenges for different genders, particularly for men and women, specifically for women with children or other dependents (Araújo and Silva, 2020). From an intersectional perspective, an assumption can be made that PhD students face singular time dilemmas depending on whether they are full-time researchers, have to divide their time between a PhD and a paid job, or are full-time students with individual fellowships. Thereby, it is possible to hypothesise that the pandemic may have maintained and exacerbated the implications of these variables, imposing increasing challenges to students with children, other routine family demands, and paid jobs.

Grounded on a literature review of studies on the topic, this hypothesis will therefore be subject to a debate that explores the experience of time during and for PhD studies throughout the pandemic, with two main desiderates: describing the experience of the doctoral period as experienced by students who classify themselves as “woman”, on the one hand, and understanding the characteristics of this experience considering the pre-existent gender bias reducing the availability of time and negatively affecting women’s temporal perspectives, therefore impacting their ability to conclude a PhD, on the other.

However, to better understand the problem of time in women’s experience of a PhD, it is relevant to understand some important features of the institutional contexts that frame the entire experience of PhD studies in Portugal, as shall be discussed in the next point. After this contextualisation, the main concepts in use shall be presented in addition to the methodology adopted for the study. The following point contains a data analysis carried out with a view to reaching the conclusion that the time equity in academia is reliant on people’s experiences, and reliant on adequate and participated institutional time frameworks.

2. Institutional Framework: a Brief Overview

Higher education institutions in Portugal seek a considerable degree of autonomy when implementing national education and science strategies. However, national policies are particularly centralised and managed mainly by the Minister for Higher Education and Science, the Portuguese Foundation for Science and Technology, and the National Agency for Assessment and Accreditation of Higher Education (A3es). This centrality demonstrates the considerable extent to which strategies adopted by Higher Education Institutions in Portugal regarding time to PhD are still highly centred around the need to establish common institutional and national time structures that respond fairly uniformly to PhD time needs.

The COVID-19 pandemic provides ample evidence of the effects of this centrality in general and national policies. Regardless of the specifics of each one, institutions rely on central government laws being passed before any decisions are made regarding PhD deadlines, online thesis presentations, and other relevant changes imposed as a result of the pandemic. Such laws specify the extended timeframes in which PhD students could expect to complete their theses in 2020-2021 (Law 38/2020, which stipulated that an additional six months would be added to thesis deadlines).

So far, Portuguese Higher Education Institutions have been strongly pressured to review PhD deadlines to improve their compliance with international and national evaluation quality indicators. To this end, Higher Education Institutions are mobilised and recommended to analyse selection processes, study plans, supervision processes and evaluation methods, among other factors directly related to writing PhD theses.

Quality, excellence, and focus on research are the three building blocks underpinning these policy guidelines. Using them as guides, institutions have become highly committed to defining and implementing measures that ensure PhD students deliver their PhD theses within the expected deadlines. Some of these measures include supervisor evaluations, constituting thesis monitoring committees, incentivising student participation in academic and scientific activities such as seminars and conferences, and writing for and publishing in relevant journals. An additional effort has also been made to foster student participation in national and international research networks.

Simultaneously, evaluation agencies also emphasise the need to appraise PhD courses based on indicators common to every HE course: goals, quality control, human and material resources, student profiles, study plans, training methodologies, academic outputs and general course organisation (A3Es, 2013, 25^o). For PhDs, the focus is on indicators such as the time spent working on a thesis, organisational support, learning and training environments, and the proximity of supervisors. Overall, as stated at the beginning of this section, the overarching policy trend has focused on

defining and implementing measures that shape institutional time structures, inducing identical PhD paces and trusting that every student estimates the time conditions accurately when working towards their PhD.

In this sense, evaluation agencies appear to be strongly committed to appraising student profiles, mainly considering variables such as previous positions, scientific area, professional situation, and research interests. Aside from an intense valorisation of students with a solid determination to pursue a career in academia or research, current policy guidelines support the representation of a PhD degree as a selective academic degree requiring full-time dedication, making it potentially incompatible with other time demands. Despite increasingly considering nationality as an indicator of internationalisation of the doctoral plan, the concept of the PhD student relies heavily on the hegemonic concept of the male/female student with or without family demands to address.

Additionally, gender is still omitted from Portuguese scientific policy, especially regarding the definition and implementation of Gender Equality Plans in Higher Education Institutions (European Institute for Gender Equality).¹ Moreover, the existing gender equality plans are still strongly oriented towards academic staff, generally involving students only very broadly, applying similar measures to all degrees. As such, this paper also intends to shed light on the specificity required for doctoral students in particular.

3 Theory

The temporal structure of time to PhD is complex due to the nature and multitude of time layers involved. Still, it is possible to assess through means of the theoretical framework developed by Zeruvavel, based on Erving Goffman (1956, p. 83) and Coser's (1974) conception in which time matters as a determinant of social and organisational functioning, which can be observed in the division between private and public time.

Zeruvavel (1981) states that time serves a "major social function" by keeping the personal and public spheres of life separate (1891, p.38). Analysing the differentiation between person and role that has taken place in modern societies, the author declares that time is "a dimension of the social organisation along which involvement, commitment, and accessibility are defined and regulated in modern society,² as time segregates the private and public spheres (p. 139). One of the pivotal modes by which

¹ <https://eige.europa.eu/gender-mainstreaming/toolkits/gear/legislative-policy-backgrounds/portugal>

² Italic added by author (Zeruvavel, 1981, p. 139).

this differentiation occurs, as Zerubavel states, based on Goffman, is through scheduling.

According to the author, the nature and extension of scheduling force people to establish a boundary between private and public, as schedules and calendars define when they are expected to exercise their duty and perform a social role. Thereby, in the author's understanding, time discipline structured with a basis on calendars and schedules should not only be regarded as a form of institutionalised power and control but also a form of "liberation" of the individual in modern and complex societies insofar as it defines the ethical and legal limits and boundaries between time, much more than between spaces. However, in the author's view, the delimitation of public and private time should not be thought of as absolutes, since "[one] ought to regard every moment of an individual's time as some combination of both private and public elements, that is, being located somewhere along that continuum" (p. 143-4).

Like Zerubavel, other authors suggested that some professional activities are more vulnerable to "greedy institutions" (Coser cit in Zerubavel, 1981, p.166). The temporal nature of the tasks does not allow for them to be sequenced following a rigid, normalised schedule and may involve continuous activities such as those related to management and care. When applied to a PhD, this theorisation enables critical reasoning to be applied to the consequences of the COVID-19 pandemic and the resulting challenges of presenting and defending a doctoral thesis. This is the case of scheduling and calendars that have been suspended and reconfigured to respond to the fear of contagion, therefore completely collapsing already very porous boundaries from the perspective of time to PhD.

Apart from other studies showing that time to PhD is a matter of concern (Parry et al., 1997; Delamont et al., 2000), other analyses state that this academic degree requires an extraordinary capacity to manage uncertainty and time availability (Louvel, 2012, Louvel, 2012; Cardoso et al., 2020, Araújo and Silva, 2020, Gravett, 2021). The pandemic forced substantive changes in the pace at which PhDs are conducted (Aydemir and Ulusu, 2020). Ashton and Pintor-Escobar (2020) suggest that the pandemic has created severe difficulties in the progress of doctoral projects due to the difficulty of collecting, storing, and processing information impacting doctoral students' assessments of the quality of their doctoral theses. They anticipate difficulties being faced in terms of doctoral students' mental and emotional health, mainly relating to their ability to assess and use time during the pandemic (Windsor & Crawford, 2021).

According to Aydemir and Ulusu (2020), researchers and doctoral students have been negatively affected in these terms; however, these authors also see the COVID-19 pandemic as an opportunity for institutions and students to evaluate their trajectories and develop other approaches that allow them to produce doctoral theses that are less time-consuming in the long run. This practice could answer some queries

raised by Hlongwa (2020), who considers that the pandemic has introduced and reinforced difficulties for people developing their careers. Wang & DeLaquil (2020) say that pandemic demands that institutions provide more personal support to PhD students, including support from a supervisor, creating informal and formal contexts for debating, and enhancing publications. Authors (Corbera, Anguelovski, Jordi, & Ruiz-Mallén, 2020) focus on the need to review teaching and learning practices, making them more sustainable, as well as reorganising care work.

Heng and Jeong (2020) speak of the adverse impacts registered on student productivity with the number of publications reduced and the pace with which doctoral theses are written slowed. Orendain and Riyanti Djalante (2020) consider that work and distance learning at a doctoral level during lockdown introduced more difficulties in conducting work plans and increased student frustration where deadlines were concerned. Kee (2021) underlines the challenges of digitalisation, stating that many of the delays and problems faced cannot be attributed to the inexistence of quantitative time but rather to the difficulty of dealing with uncertainty, frustration, and fear which define the context leading up to anxiety. In this case, Kee (2021) notes the relevance of what could be referred to as “relational time”: the portion of time that can be shared or negotiated within groups, fuelling persistence. Similarly, other authors (Börgeson et al., 2021) declare that the proximity of supervisors during the pandemic is a variable that affects the doctoral experience of time, as supervisors can have a role in managing emotions. Nonetheless, some authors say that too much emphasis on the need to discuss the uncertainty and ambiguity of the pandemic can be perverse (Eigege & Kennedy, 2021), leading to more time being spent than gained.

Gender is a crucial variable to be problematised from an intersectional point of view when referring to academia and time, along with other variables such as social class, scientific area, race and ethnicity. In Portugal, nationality is also a very relevant variable to consider, as a number of doctoral students come from other Portuguese speaking countries, mainly Brazil.

Cardel and others (2020) say that despite a greater representation of women in PhD degrees, they still face many obstacles to their progress in academic careers. Additionally, broad literature (Castañeda-Rentería, 2020, Araújo et al., 2021) suggests significant gender differences in the impact felt as a result of the pandemic (Oertelt-Prigione, 2020), as women have taken on much more work than men at home. Furthermore, they are more vulnerable to loss of employment, university and company closure, and to be affected by the general economic drawbacks caused by COVID-19 worldwide (OECD 2019; 2020). Having children, the conditions to carry out their research project at home, migration and professional circumstances (being a full-time student, holding a research contract, or working outside the university with a payable contract) are core variables affecting time availability, mainly when most of the work is

conducted at home using multiple information and communication technologies (Nadal, 2020). Apart from this, one can also mention the fact that PhD students hold a particularly vulnerable position in academia, often having to accomplish invisible work, that is, “academic housework” (Conesa, 2019, p.43).

Viglione (2020) argues that women’s productivity has dropped when working from home, stating that women do more housework than men and have more responsibilities where their dependents are concerned, whether they are children or the elderly. The author also draws attention to the fact that the existing gendered nature of academic work impacts women’s and men’s lives differently. Women are more susceptible to being involved in activities directly linked to managing the pandemic, giving them less time to devote to writing and publishing, in general. According to Rabia et al. (2021), this need to simultaneously respond to different time demands is a crucial issue that adversely impacts the trajectories forged by women in academia. The authors argue that academic women are stressed, frustrated, and lack time for sports and other self-care, though when analysing the context further, they also state that academic women usually have more support from their partners than other women. In the authors’ view, the pandemic negatively affected women’s ability to be promoted in the short term as it caused a period of stagnation. Similar ideas are shared by Huang, Gates, Sinatra, & Barabási, (2020). Gender issues in academia, particularly in PhDs, must also be regarded considering the general neo-liberal time framework that affects people’s choices regarding their chances of pursuing academia at this level (Abdellatif & Gatto 2020).

As noted, pre-existing literature provides an account detailing the persistence of gender bias in academia. Despite the increasing need to tackle broader gender conceptualisations, a firm conviction that a “female” and a “male” PhD trajectory still remains, connected to a gendered vision of time in academia.

This paper therefore serves to argue that these differences need to be unpacked and problematised, especially at a time of crisis and rupture when traditional, conservative cultural patterns that box both women and men into fixed roles and expectations find broader ground on which to flourish. An analysis of the experience of women completing PhDs will therefore be conducted with a particular focus on examining how several variables, particularly whether they have kids or not, may permeate and affect their experience of time and time perspectives, unveiling the complexity of the time elapsed throughout a PhD.

4 Method

Studying the experience of time is a complex exercise because most of the questions asked by individuals are circuitous, requiring indicators to be identified from which to explore the valuation of time and the variables that affect the uses and passage of time. The concept of doctoral time as a (time) rhizome also increases the need to use research techniques of a qualitative nature, which facilitate understanding of the phenomenon and its contextualisation.

Though qualitative methods such as ethnographic research and interviews are often preferred given the difficulties in accessing and recruiting people for interviews during the pandemic, for this specific study, a survey was sent out via the websites of various associations. The survey included the question “what is your gender” (providing the options: woman, man, other) and sought to obtain comprehensive information that would allow for a more detailed analysis to be carried out of subjects’ circumstances and experiences. As such, the survey also included open questions to allow respondents to base their answers on personal experience and share how they have coped with the constraints imposed by the pandemic.

Answers to closed questions on the survey were analysed using SPSS software. Answers to open questions were entered into a database and later analysed using thematic content analysis, in which themes and categories were determined that allowed for trends to be detected in the answers. Through this analysis, links were established between variables considered relevant to deepening the gender bias in doctoral careers, the links found being having children, age and scientific area. The categories determined derive from the analysis dimensions established for the research, which are as follows: i) experience of time during a PhD; ii) concerns about the PhD; and iii) perspectives for the future. The survey was sent to PhD students online, through associations and social networks, was available for 15 days and was accompanied by a message stating the ethical commitment of the request.³

An epistemological statement is necessary at this point: the purpose of this survey was not to equate women with carers, therefore crystallising traditional gender norms. From the offset, the intention was to discern more clearly who the PhD students were and how gender bias affects their experiences of time during the pandemic, taking into account the variables vulnerable to gender bias and related to living conditions, including scientific area and the existence of children (Castañeda-Rentería, 2020).

The majority of respondents considered themselves “women”. From all the answers received (152), only 27 listed themselves as “man”, one as “other”, and 124 as

³ A Portuguese version of the survey is here: <https://forms.gle/gFYJcUJJ6HGfVyWJ8>

“woman”. As this paper only intends to analyse the experience of PhD students who identify as “women”, only the answers provided by these 124 women were analysed.

It may be noted that the sample used for this study is small (124 women and x men who were not considered in this analysis), making the study exploratory in nature and helpful in shedding light on how women experienced PhD studies during the pandemic, providing food for thought about how higher education institutions can now accommodate and address time and gender issues. In this sense, results need to be considered cautiously, stressing the need for further research with a broader focus, both in terms of gender and institutional time frameworks.

4.1. Sample

As mentioned previously, 126 responses were received from women in PhD programmes, with two subsequently removed from the database having been rendered invalid (repetitions). Of the total respondents, 78% did not have children. The percentage of women with children was globally much lower, and most were studying social sciences (53.8%). Student age groups were relatively well-distributed, with a predominance of students aged over 30, and women without children tended to be younger, aged between 23 and 35 (38% and 46%, respectively). About half were pursuing doctoral degrees in Life Sciences, Engineering, and Science and Technology, with the other half pursuing Social Sciences and Humanities across several Portuguese universities. Despite the sample being limited, it essentially reproduces the circumstances of doctoral students detected in Portugal, who are increasingly female with higher completion rates in the areas of Health and Life Sciences.

Table 1. Female respondents* living with children

Children at home	No.	%
No answer	1	0.8%
No	97	78.2%
Yes	26	21.0%
Total	124	100.0%

Source: PhD student Survey (2020-Portugal)

5 Findings

As stated previously, the main objectives of this paper are: to describe the experience of the doctoral period as experienced by students who classify themselves as “woman” on the one hand, and understand how they relate to the future and their many worries on the other, by also exploring how such conceptions relate to gender. Following the

themes determined for content analysis, this section is therefore divided into two main themes: i) student experience of time and ii) time perspectives.

5.1 Student Experience of Time

5.1.1. Theme 1: Perception of the impact of the pandemic

A central theme addresses the consequences of the pandemic on PhDs, as experienced by PhD students. Overall, women doing PhDs declare that the pandemic has negatively influenced the time available to dedicate to their PhD project. Only a small percentage of answers reported that the pandemic did not affect their studies.

Table 2. The influence of the pandemic on time to PhD

The influence of the pandemic on time to PhD		No.	%
No answer	<i>Very influential</i>	1	100.0%
Total		1	100.0%
Without children	<i>Not at all influential</i>	7	7.3%
	<i>Slightly influential</i>	9	9.4%
	<i>Somewhat influential</i>	23	24.0%
	<i>Very influential</i>	33	34.4%
	<i>Extremely influential</i>	24	25.0%
Total		96	100.0%
With children	<i>Not at all influential</i>	5	19.2%
	<i>Slightly influential</i>	1	3.8%
	<i>Somewhat influential</i>	2	7.7%
	<i>Very influential</i>	12	46.2%
	<i>Extremely influential</i>	6	23.1%
Total		26	100.0%
	<i>Not at all influential</i>	12	9.8%
	<i>Slightly influential</i>	10	8.1%
	<i>Somewhat influential</i>	25	20.3%
	<i>Very influential</i>	45	36.6%
	<i>Extremely influential</i>	31	25.2%
Total		123	100.0%

Source: PhD student Survey (2020-Portugal)

5.2. Theme 2: Difficulties During the Pandemic and Time Availability

When asked about the difficulties faced during their PhDs, most women without children talked about stress, anxiety and lack of concentration (38%), also highlighting difficulties in dealing with family demands. However, while women without children more often pinpointed difficulties in separating work/family time and space (18%), women without children noted their difficulty as “living with family members” (46%), which connected to difficulties in managing time, as exemplified:

“Difficulty accommodating my child's schedule and daily routines with work. I need to work on my thesis at night, taking advantage of calmer times of day to concentrate”, They also say that:

“At home, it's easier to get distracted, and I am less able to concentrate. This is probably also due to the circumstances I am facing”.

For them, more intensive use of their house reduces the availability of time and space at home, due to the “lack of peace” and “tranquillity”, as “when at home with the family, it's almost impossible to do my job and help my kids with schoolwork”. Women without children firstly highlight the lack of social contact and isolation and secondly insufficient conditions and technical means to dedicate themselves to their projects, stating that “working at home is very difficult”. Still, childless women also often talk about the difficulty of space and time at home and in dealing with interruptions from neighbours and family members, as seen in the following excerpts:

“I had no one to ask when I had questions. As my place of work and rest overlap, they do not allow for psychological rest and major interruptions from family members break my work rhythm”.

Women without children mention overlapping activities in the same physical space, often in the bedroom or living room, increasing the difficulty of separating leisure time from time spent writing their thesis.

“I saved time commuting and had everything I needed. However, I work in my bedroom, and sometimes this means that there is no separation between leisure and work”.

Women with children drew more deeply on valuing the demands made on them at home by other family members in their answers, while women without children primarily based their answers on the physical conditions affecting their research.

Most also mentioned that lockdown itself was when most of the changes and variations in the pace of work took place, altering their routines and therefore affecting the time available to work on their thesis.

5.3. Theme 3: Opportunities and Endeavours

Consistent with the results presented above, the doctoral students surveyed tend to state that the pandemic has not significantly altered time, as the time available to them to complete their PhD continues to be dominant.

However, in health sciences, science, and technology, PhD students without children emphasise the possibility of having used the pandemic and lockdown as an opportunity to focus on their thesis and publications while also highlighting reduced progress in their research, explaining this reduction by the fact that the university was closed and laboratory activities reduced, therefore impacting on methodological pathways:

“A period of uncertainty and anxiety about fieldwork that was entirely interrupted. A period of rethinking used to restructure the initial project”.

“An opportunity to read a lot. However, a period of blockages to experiments and results”.

“A period of uncertainty and anxiety about fieldwork that was completely interrupted.”

“A period of rethinking used to restructure the initial project. However, the period was dedicated to writing”.

“A period used to focus on finding a healthy balance between my thesis, personal life and hobbies”.

Female PhD students with children who work in social sciences emphasise the fact that the pandemic has favoured separation from scientific advisors, leaving them feeling isolated on the one hand, and the need for family care, on the other:

“The most difficult thing was managing my PhD with two small children at home. I was on an exclusive PhD scholarship, but I really should have been on leave to support children under 12”.

“A difficult period of work. I practically had no support from my advisor and started to have a lot more housework and less peace of mind, making it difficult to get everything done at once”.

“A period in which my pace of work slowed down, supervision was considerably reduced, and difficulties faced managing writing my thesis and family demands meant it was not easy”.

5.2. Time Perspectives

5.2.1 Theme 4: Concerns and worries during the pandemic

Along the same lines, most women with children who responded to the survey say that their concern about the productivity and progress of their PhD thesis increased during the pandemic (69.2%), as the time available to work on their PhD decreased. In contrast, women without children said that the time available to work on their thesis increased during the pandemic (38.1%), while others stated that it remained unchanged (35%). Though the pandemic and subsequent lockdown produced adverse conditions increasing the emotional charge and uncertainty already dominant in doctoral careers, both respondents with and without children claim that concern surrounding the completion of their doctorate continued during the period analysed (41%).

Concerns relating to productivity as well as lack of concentration are reported to have increased during the pandemic and lockdown, consistently registering as slightly higher for doctoral students with children, though high for both groups (80% and 70%, respectively). In this specific sample of respondents, a very high percentage (67%

without children and 65.4% with children) reveals that concerns about finishing their theses on time have increased.

30% state that the pandemic caused them to feel more concerned about family expenses and paying fees. This concern is more salient for women with children mainly working in social sciences and humanities, while women without children (26 out of 124) primarily work in health sciences, sciences, and technologies.

Doing a doctorate is not an automatic way in which to improve professional circumstances or gain employment in research and science. In most cases, vacancies are scarce, and those that do exist are very precarious, subject to temporary employment contracts. Some women did not answer the question on this matter. However, most of those who responded said the more significant difficulties could be put down to their professional circumstances: uncertainty about what will happen once they have presented their PhD work and maintaining their financial circumstances. Beyond the uncertainty characterising the overall PhD process and the uncertainty and ambiguity brought by the pandemic, it appears that these PhD students are also dealing with the uncertainty of knowing whether their PhD will bring tangible rewards to their professional careers. Thus, for these women, far greater than the concern surrounding finishing their doctorate is the subject of employment once it has been completed (33.1%).

“And of course, unemployment after the PhD, not being good enough, but that was already a concern prior to the pandemic.”

Even so, differences were noted between women with and without children. The former placed a greater emphasis on finishing, finances, and children (23% and 11.5%), while the latter responded with a greater focus on employment and finishing their PhD (33%), as noted in the table below.

Table 3 Main concerns during the PhD

Main concerns during the PhD		No.	%
No answer	No answer	1	100.0%
Total		1	100.0%
Without children	No answer	32	33.0%
	Finishing PhD	16	16.5%
	Employment post PhD	33	34.0%
	Financial conditions	8	8.2%
	Other	2	2.1%
	Health	5	5.2%
	Not sure	1	1.0%
Total		97	100.0%
With children	No answer	3	11.5%
	Finishing PhD	6	23.1%
	Having kids at home	3	11.5%
	Employment post PhD	8	30.8%

	Financial conditions	3	11.5%
	Other	1	3.8%
	Health	2	7.7%
Total		26	100.0%
Total	No answer	35	28.2%
	Finishing PhD	22	17.7%
	Having kids at home	3	2.4%
	Employment post PhD	41	33.1%
	Financial conditions	12	9.7%
	Other	3	2.4%
	Health	7	5.6%
	Not sure	1	0.8%
Total		124	100.0%

Source: Survey of PhD students, 2020

Half of the doctoral students surveyed talk about anguish, anxiety, and insecurity (about 60%), with no significant disparities between women with children and without or scientific area worked in. Only 8% (similar between women with and without children) indicate optimism and confidence. Most of the students stated that they had never considered postponing their thesis before the pandemic. However, in September 2020, 31% were considering postponing, and only 41% believed they would deliver their thesis within the preestablished deadline. Notably, the primary source of uncertainty pinpointed related to financial conditions after the PhD, which were chiefly referred to by women with fellowships and precarious work contracts.

6 Discussion

As stated initially, it is essential to clarify that the main conditions taken into account for the study of this paper are the stories and experiences of PhD students who classify themselves as “women” during the pandemic, drawing conclusions about how they value their period of study and finding strategies that can be employed to overcome the difficulties connected to gender bias, which is demonstrably still prevalent.

Under these assumptions, differences when compared to men (which have been explored in other publications by the author) or other genders, including queer and transgender, are left out of this analysis and can be expanded upon in the future. These results do not serve to crystallise differences, as comparisons have not been made; rather, they allow for the subject of female identity in academia to be expanded upon, and the assumption that these students tend to give more time than they do receive it from others confirmed.

The issue of time and academia has been debated by many authors, especially in recent years. This discussion has mainly focused on the debate around the neo-

liberalisation of the time spent in education and on research, which is highlighted by the increased industrialisation of academic and research work. Thus, one can say that conditions have changed for everyone in academia, regardless of gender, as time in education and research has essentially become a resource, a matter of money valued both now and, potentially, in the future.

Research shows that the increasing linearisation of time in academia combined with an increased number of women in lower research positions (PhD students and research assistants) is prompting and reconfiguring many of the pre-existing selection processes that exclude people from an academic trajectory who, for gender reasons, have less "time capital" to invest in the linearity and continuity that academic work increasingly requires. Differing genders, particularly women and men, can be pinpointed as a factor in this debate since they constantly display features that may distract them from the rules of practice that govern academic life across the globe today.

Various studies have explicitly demonstrated that nowadays, academic activity builds on expectations created by players within the system, keeping them waiting for an opportunity for a steadier work contract, which will, in turn, provide them with better living conditions. A PhD degree is one of the "stages" people need to overcome to aspire to career opportunities further up the ladder. As authors of the sociology of the time state, time perspectives refer to how one relates to the future and understands one's role in shaping that temporal horizon. Therefore, they can shape the present, distil important reasons behind (in)action and hold responsibility for psychological states, producing substantial social consequences.

When applied to PhDs, this theorisation provides critical reasoning behind the consequences of implications of the COVID-19 pandemic in exacerbating the hardships faced in completing a Doctoral Thesis. These hardships are particularly applicable to women for fundamental reasons. Firstly, women's time remains socially indivisible, unplanned and attributable (or at the disposal of) to others. Since PhD time does not entail a strict separation of time, especially when at home, their time becomes much more permeable to other demands. Secondly, PhD time is rhizomatic (Gravetts, 2021), marked by multiple interconnected, overlapping intervals involving alternations, downtime, and the significant exploitation of individual and self-time. Thereby, the obligation to work from home requires PhD students to juggle multiple time demands, rendering their time much more fragmented and unstructured, therefore leading to highly complex circumstances arising regarding the organisation of their time.

7 Final Considerations

As Manathunga (2019) argues, an increasing need is faced to devise and implement a temporal equity policy in academia, assuming that most inequalities come about not as a result of differences in “quantities” of time but mainly its fragmentation and undervaluation.

This short piece of research shows that PhD students spoke of various difficulties faced in completing their PhD, referencing institutional time structures that became more noticeable during the COVID-19 pandemic: i) class schedules; ii) deadlines; iii) supervisor and teacher timetables; iv) scientific meeting schedules, and others. They also pointed out other aspects related to individual experiences of time exacerbated by the intensification of use of their homes: i) time for family, time for paid work and time for PhD studies.

The pandemic affects everyday lives of women. This has rendered them less sure about the future, which may mean they delay delivery of their thesis in addition to levels of anxiety and dropout rates increasing. Therefore, following the assumptions made surrounding the sociology of time, especially those made by Zeruvabel and Coser, who emphasise the relevance of time structures, one may conclude as to the increasing importance of Higher Education Institutions and Doctoral Directors' ability to quickly provide new calendars and deadlines in a move towards an institutionalisation of time politics, a move which would help people redirect students' work, even should it mean reformulating work plans, particularly for those carrying out PhDs requiring in-depth empirical research conducted in laboratories, even if in part.

In this sense, the data discussed in this paper underlines the need to further specify the measures drawn up for the PhD student population within the scope of Gender Equality Plans, which go beyond collecting quantitative information on gender, age, or scientific area. Firstly, the GEP should consider issues of time as an essential and variable framework contributing to the progress of a doctoral thesis: time available to pursue the PhD; time constraints imposed by family or work; time structured and regulated by Higher Education Institutions, PhD programme directors, teachers and supervisors; and time as a vital resource in preparing and presenting a thesis. Simple, seemingly meaningless factors such as deadlines for projects or other outputs, calendars or meeting and class schedules can have a huge impact on time experience, with subjective and objective implications. It has therefore been rendered crucial to consider both the diversity of expectations regarding PhD studies and the disparities in PhD students' living conditions and trajectories, which are intrinsically linked to a time and gender bias still persistent in Portuguese academia, producing negative implications felt mainly by women.

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