

The pandemic and the academic mothers: present hardships and future perspectives

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ABSTRACT

Gender differences in academia are well-known. Women publish less, achieve higher positions less frequently, and have more interrupted careers. Mothers, more than fathers or childless men and women, suffer these disadvantages. Women academics have to deal with the work-family conflict, the participation in both work and family roles are incompatibly demanding. The closure of childcare services and the impossibility to benefit from informal care (mainly via grandparents) made the pandemic a potential accelerator of these drawbacks for academic mothers. Academic work is basically incompatible with the everyday care of children. Analyzing in-depth interviews, in this article we show how mothers of young children had to reorganize their job priorities during the Covid-19 global pandemic. Moreover, we describe the perceived effects of the pandemic on their future career. We showed that the pandemic changed the priorities of academic mothers in a direction that is unfavorable to their careers: mothers devoted most of their time to teaching duties and stopped research. Moreover, they felt an increased gap in their relative competitiveness with male and childless colleagues.

KEYWORDS Mothers; academy; gender; teaching; research; competitiveness

Introduction

Having children is detrimental for the academic career, primarily for women. Past literature has shown that women who obtain a stable position in academia are more likely to be single and childless than men: married mothers of young children are 35% less likely to have tenure-track positions than male peers in the same family situation, and 33% less likely than unmarried childless women (Mason *et al.* 2013). Academic mothers have to deal with the so called work-family conflict, the ‘simultaneous occurrence of two (or more) sets of pressures such that

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compliance with one would make more difficult compliance with the other' (Kahn *et al.* 1964: 19), that makes the pressures for work and family incompatible. The literature confirms that the work-family conflict among academics has a clear gender cut, with women suffering more of the hardships of balancing their family duties and their research tasks (Forster 2000; Santos and Cabral-Cardoso 2008; Woodward 2007). The recent pandemic might have exacerbated this gender divide. Academic mothers, more than childless people and fathers, had to find new balances, reorganize their work, and discover new resources. Academics, in fact, never stopped working during the lockdown. The pandemic experience didn't break research or teaching duties (with the exception of in-lab research). The job moved from offices to homes. What clearly emerged was that academic work is incompatible with fulltime childrearing when career advancement is based on the number and quality of a person's scientific publications, and their ability to obtain funding for research projects (Minello 2020). In this profession, time, silence and concentration are pivotal to accomplish these tasks, and these conditions are hard to find where the work-family space is not separated. The lockdown has exacerbated gender disparity, since women, and especially those with children, spent more time in care activities than they did before (for a focus see Manzo and Minello 2020; Martucci *et al.* Forthcoming).

Gender disparities were present in the houses of academics before the lockdown. Female academics perform more household labour than men do (Schiebinger *et al.* 2008). Moreover, the precariousness of the academic track is gender unbalanced with women having much more difficulties than men to reach stable positions (Murgia and Poggio 2019). The beginning of an academic career is marked by a prolonged period of precariousness, one which typically coincides with a woman's reproductive period. Furthermore, overall, women publish less than their male colleagues (She Figures 2018), and are cited less than men (Larivière *et al.* 2013). Moreover, those who have care duties have an additional disadvantage (Santos and Cabral-Cardoso 2008; Bozzon *et al.* 2017). This article does not focus on care duties or gender division of roles, but on the concrete consequences of the lockdown on research productivity, due to this redefinition of domestic tasks and childcare, and their effects on the work-family conflict. There is already some empirical evidence demonstrating that women have been producing less than men during the pandemic. There was signal of a disparity in all disciplines. In medicine women are publishing less than men this year, with respect to the same period in 2019 (Andersen *et al.* 2020). In the analysis of the submissions in preprint

servers for physics, math, computer science, statistics, and other quantitative disciplines, Frederickson (2020) shows that there is an increase of both male and female submissions, but those of men are increasing faster than those of women. Amano-Patiño and colleagues (2020) demonstrate that among economists, young and mid-career researchers, as well as women, are less present in publications on the COVID topic. But why can't women publish as much as they did before? Is it only a matter of care duties? Where have women's efforts been directed during the pandemic? Together with the family reorganization there has been a new organization of time and priorities. This article focuses on showing how mothers of young children had to reorganize their job priorities, focusing more on their teaching duties than on research. In the short term, the consequences will be limited to the reorganization of everyday life; in the long run, these changes in productivity will affect careers. Aside from the uncertainty caused by the pandemic, insecurity and stress have always existed in the academic career path (Clarke and Knights 2015). The pandemic might have exacerbated the sense of insecurity of academic mothers and enhanced their fear for the future of their careers. We explored the expected consequences of the reduction in productivity among academic mothers and captured their fear for the consequences of the lockdown.

Research design and method

This study is part of a larger research project, the Smart-Mama study, where the social effects of the COVID-19 crisis are explored through the lens of domestic rearrangements of parenting duties due to the increase in remote working during the lockdown in Italy and the US (Authors 2020b). We reached out to professional women who were working from home and had young children between the ages of newborn to 5-years-old. The women were currently living in northern Italy, the area most affected by the pandemic, and throughout the US. Using Zoom and Skype, we interviewed the women regarding their daily lives and how life has changed during the lockdown. From March to June 2020, we contacted over 80 mothers. Some of them participated in the study, others just wanted to express support for the project. For the purpose of this study, we have selected a sample of fulltime academic women from various ranks. This included tenure-track, tenured, and non-tenure track faculty, lecturers, and graduate students; part-time or adjunct professors were not included in this research. Currently, after the PhD Italian academics enter the academia either with a research fellow (post

doc) or a non-tenure track assistant professorship. The difference among the two paths is that the first, the most common, does not formally include teaching duties. Before reaching a tenure track assistant professorship and ending precariousness, academics can be in the previous position for a maximum of 12 years. After the tenure track, there is the real professorship (with a two steps, not compulsory advancement, from adjunct to ordinary professorship). The trajectory is similar in the US, most academics enter their careers either as post-docs or as Assistant Professors (this can be tenure or non-tenure track); although there are increasingly large numbers of 'lectureships' and other more precarious and lower-paid positions. If on the tenure track, the academic's portfolio is usually assessed after 5–7 years, at which point they are promoted to tenured Associate Professor. If the portfolio is rejected, the faculty member usually has one year to add more publications before their contract is terminated. The long precariousness of the career might increase the feeling of the fear for the future especially among those with no permanent position.

In our sample, the mean age of the Italian respondents is 37,3. Five of them have two kids. Two of them are PhD students, two are research fellows, three are non-tenure assistant professors, and five are tenure assistant professors. The mean age of the US respondents is 39. Of the 25 women in the US sample, 11 had one child, 10 two children, and 4 had three children or more. There were 6 doctoral students, 11 professors who were not tenured, and 8 professors who were tenured.

The sampling consisted of identifying women who posted content on Twitter about being an academic or professional mother; recruiting through academic and professional mother groups on social media; and personal networks of academics and professionals. The sample has not the aim to be representative of the average profile of the academic mothers. We opted for a recruitment using the social media and not general mailing list, with the specific aim of not limiting our sample to one single university or field of study, and to be as much more inclusive as possible. We are aware that women who reacted to our request could be sensitive to the topic and willing to share their situation. At the same time, since every interview lasted for at least half an hour, we know that there can be some academic mothers who could not even devote this time to our project.

We conducted real-time, in-depth interviews with 13 academics in Italy and 25 in the US. All of these interviews were conducted during the initial coronavirus lockdown phase between April 15th and June 4th and lasted,

on average, between 30 minutes to an hour. We asked participants questions about their daily schedules and childcare before Covid-19, and during the lockdown. Participants were also asked about their sources of emotional support, as well as positive and negative experiences of the lockdown, and, what is crucial for this study, their expectations of the pandemic's long-term consequences on their academic career. In this paper we will focus on the Italian case, however results are also controlled through a comparison with narratives collected from the US sample to understand whether the dynamics we found for Italy could be somehow common to other contexts. Given that the US has a different social setting than Italy – firstly, for the welfare regime characteristics; secondly, for the different availability and affordability of childcare services; and thirdly, for the different academic tenured track system – it was interesting to find very similar dynamics among our American and Italian respondents. According to the classic classification of the welfare regimes (Esping-Andersen 1990) Italy and the US, in fact, belong to diverse welfare regimes: conservative south European the first, and liberal the second. Italian welfare state is much more familistic, the presence of childcare services is not sufficient to cover the actual request (Istat 2020), women employment is below the OECD mean, being around 40%, working mothers quit their job quite often after the birth of the child (Istat 2019). The US system is instead based on a limited state intervention. Childcare services are rarely provided by the state, female labour force participation is around 60% (Worldbank data). Italy and US are somehow similar in terms of gender division of the domestic roles. In particular, American married women spend almost twice as much time on household and childcare responsibilities than men (Bianchi *et al.*, 2012), Italian women hold the record among Europeans for daily family work (Eurostat data). Both Italian and US academic women are in societies that hardly encourage women labour force participation and gender equality, moreover, they are facing the challenges of a competitive work environment. Both the Italian and the American academic systems are highly competitive, and fragmented. The precariousness of the career of the Italian women in the academy, and the hardships to reach top positions have been extensively demonstrated (De Angelis and Grüning 2020, for an overview Murgia and Poggio 2019). In the US, women in the academy face difficulties to reach top positions and to exit from precariousness. Among academics with young children, 53% of women reached tenure, compared with 77% of men (Mason and Goulden 2002). The two countries are, hence, interesting to be studied together,

especially in the context of the pandemic: after China, Italy and US were the first two countries facing the spread of the COVID-19. Italy was a fore-runner, and US followed. Both the Italian and the American academic mothers were the first to deal with the limitations in their job activities and both the institutional settings didn't react with proper answers to their requests for a reorganization of the job activities.

Working academic time: what they did and what they postponed

The reduced time at disposal leads to a reorganization of the academic job. As we have said, promotion in academia is based on achievement; scientific publications and research projects are fundamental. During the time of the pandemic the work priority for most of our interviewees was, instead, online teaching. Teaching duties are a relevant part of the job at all times, but they do not count a lot on the job market or towards promotion, not in the Italian nor US systems. Moreover, the choice of continuing with online teaching without stopping or reducing it, has been a precise choice at the university level: teaching became the priority over research. Asynchronous teaching is preferred by many of the mothers, because to teach live via streaming, they would need to be sure that the children are not disturbing them, and it would require much more concentration and time management. Recordings, instead, can be made at any time of the day, and the mothers often prefer to do it at night, after the children are asleep. Finally, online teaching has, of course, necessitated some modifications with respect to traditional teaching. Hence, time devoted to this task is doubled: on the one hand the time behind the scenes to convert the teaching material from traditional to online, or to prepare the lectures, and on the other hand the 'on stage' recording of the lecture. This new arrangement of teaching creates some performance anxiety in the academic mothers, because posting the videos at night or not offering streaming lectures might be viewed negatively by students or administration.

"Now disaster! I started working when the baby was asleep and in the evening night, including the recording of the lessons, because I'm also doing a 9 credits¹ course anyway, so not even really trivial. I have to prepare all the slides, because I used to do traditional, old-fashioned blackboard lessons. It takes me a long time to prepare my lesson and then record it. And I do

¹In Italy each credit of teaching corresponds to 6/12 hours in class.

asynchronous mode, fortunately, so it's not like I have to connect to a specific day at a specific time. It wouldn't be feasible for me right now."

(Maria, 36 years old, non-tenure assistant professor, one child aged 1 year old)

"I see it also from the didactics point of view, I can't videotape, and students prefer videotaped lessons, even though I explain that I don't have enough sound-proof space without screaming children for two hours, where I can record a decent lesson, they insist on complaining that I only give annotated slides. This will certainly have a bearing on the assessment they will give the course and the teacher, and I hope it will remain in the sensitivity of those who will then go on to take this assessment, whether or not they know about my condition."

(Frida, 36 years old, postdoc, two kids, aged 11 months)

If the priority is teaching, research is discarded. For those who are trying to do it anyway, there is again the issue of time. Writing needs concentration and inspiration that cannot be constrained into a limited time of the day. Many of the women we interviewed declared they did not focus on research during the lockdown and this is the major issue they face. As we will see in the next section, the impossibility of focusing on research leads to the fear of the future.

"No, writing is the very last thing I'm doing. In fact, I'm not doing it. I have an article that has a predetermined deadline with another person and I'm trying to work on that, but I'm not really doing it. Everything else, things that let's say didn't have deadlines, weren't on a review path, I'm not doing those things. I make calls, meetings, teaching once a week and correcting reports for a European project deadline, and so I'm up to my neck in water."

(Michela, 38 years old, non-tenure assistant professor, two kids aged 2 and 5 years old)

Fear of the future

The changes in the organization of care, time restrictions, and the essential reduction of research work, create a sense of fear for the future and a feeling of inadequacy. Overall, consequences might be really concrete and have an impact on the career path and the financial situation of the academic mothers. Many of them are worried financially about the impact of the pandemic on the job market. The pandemic might be crucial, especially for those at a turning point in their careers. Advancement in academia is still strictly correlated to the number and quality of research publications, despite the current discussion of the gendered nature of academic citizenship (Manzo 2019). In Italy, as an example,

some of our participants cite the National Scientific Habilitation as a goal they will not be able to achieve due to COVID.² Three of our mothers told us that they are not able to publish as much as they would need to reach it. The pandemic puts them at risk for long-term consequences.

“I was supposed to get my license now in May, I was supposed to write something important about a show that has to open. None of that.”

(Camilla, 40 years old, non-tenure assistant professor, two kids aged 8 months and 7)

“I’m not writing and I’m not publishing anything, if you count that an average article goes on for two years and he told me that the license had to be taken in two years.”

(Michela, 38 years old, non-tenure assistant professor, two kids aged 2 and 5)

Overall, among most of these mothers an awareness of being disadvantaged emerged, especially if they compared themselves to their colleagues. The respondents feel resentful of colleagues who don’t have children and are able to be really productive and thoughtful during the pandemic. They do not accept that their productivity will be compared to that of those without caring duties. Mothers do not only evaluate present behavior of the colleagues (mainly those without kids), but also long-term consequences of this situation: colleagues without kids are researching more, publishing more, and disseminating more. The issue seems to be even harder when the comparison is made with male colleagues with children. Here mothers do feel the ‘gender issue’, and express a sense of frustration that kids do not have the same effect in determining the work time for mothers and fathers.

“I’m doing everything half as fast as I would have done without children, as many other colleagues without children are doing. I have friends who work like crazy on Saturdays and Sundays non-stop, and I just finished my analysis. And so I say “sure, I would like to see at the end of this period the productivity of me and of a me without children, the production as it will be” I think I will be disadvantaged also from this point of view.”

(Frida, 36 years old, postdoc, two kids, aged 11 months)

“The comparison with my colleagues is overwhelming, let’s say. And it hurts even more with fellow men who have children. Because, you know ... the fellow man who has children and has already published three articles on COVID and has

²It refers to a qualification that is needed to become Professor in Italy. Publications and the career are evaluated by a national committee, to succeed researchers must exceed national level thresholds. <https://www.anvur.it/en/activities/asn/>

opened a conference ... There's no other explanation, except [his] wife who's as messed up as I am!"

(Maria, 36 years old, non-tenure assistant professor, one child aged 1 year old)

And what happened to US academic mothers during the lockdown?

"I haven't even opened the file ... teaching has its urgency ..." declares Olivia, a 46 year-old tenured professor with a five-year-old son, confirming that the pressure of teaching duties is common in the US context. Also among our US respondents, motherhood is seen as the limit, as the role that cannot be abandoned even not for teaching duties: *"I can't do live classes because my kids always find me, it doesn't matter where I go and if the door is locked they'll bang it down. They don't go after my husband as much, we're trying to fix that situation."*, says Julia, a 42 year-old tenured professor and mother of three children ages 1, 2, and 3 years-old. In the US many schools and departments either canceled the Spring 2020 evaluations or are not using them for tenure or other promotion measures. Still, respondents were giving the priority to teaching, which lead to a difficulty in balancing time for proper research.

"It's hard because if you're trying to write and you're waiting for a creative streak, a moment of inspiration, it's not always going to happen between 9 and 11am, I've been training myself to work when I have the time to, that's been such a struggle."

(Brittany, 39 years old, tenure-track professor, 3 month old baby)

Natalie, a 41 year-old tenure-track professor, summarizes the perception of being inadequate as follows: *'I feel like a real cognitive deficit'* from being around children (ages 1 and 3) all day, expressing the sense of frustration and the lack in concentration with respect to the colleagues. According to one of our interviewees they are *'not doing this cutting edge research that I would want to be doing and I know I have the skills, I just don't have the time, or space, or brain power.'* (Abigail, 39 years old, doctoral student, 4 children under 10 years old). Finally, Americans, as well as Italians, feel the pressure of being compared to male colleagues who don't have care duties.

"The reports that men are putting in many more [papers] is definitely something I've seen, my colleagues and my husband are submitting things like mad and I'm just trying to keep up ... with what needs to occur without sinking. And those

without children I also see being much more active, at least with communication, more than they were before. I wonder with the others who have full productivity, if that's something that will end up pushing them ahead."

(Ali, 35 years old, tenure-track professor, two children ages 3 & 6)

"I'm very concerned about being evaluated compared to male colleagues or others who don't have caregiving responsibilities."

(Bridget, 39 years old, tenure track professor, two children ages 1 & 3)

Conclusions

The concern that the pandemic would have an effect on the career of academic women was felt from the onset of the lockdown, when all care services were suspended. Research was immediately undertaken to observe if there was a reduction of women's publications compared to men, and several articles were already published on the topic. Our article explores in depth the present hardship and future perspective of a specific group of academic women: the mothers of young children who experienced an increase in the time dedicated to care. We show that their strategy to cope with their job duties consisted in giving the priority to teaching, at the expense of research. Teaching has diverse dimensions: it not only refers to online classes, but also mentoring the students or, during the pandemic, preparing different types of lectures. These activities are time consuming. The focus on teaching is, of course, a consequence not only of individual choices, but also of precise institutional decisions and academic policies. The Italian academy immediately opted for the online relocation of all teaching activities, without providing any form of support, if not purely technical (for example, access to departments for the recording of the lectures). Neither a reduction in teaching hours nor a shift in the duration of the semester was considered. As we have seen, this has completely shifted the focus of the activities of academic mothers, who have invested much of their attention on teaching duties. These women had to postpone or discard their research, with consequences for their careers. This shift affected academic mothers' perceptions of the future. The underlying competition with academic fathers or peers who do not have care duties emerged to the surface. The fact that universities did not take any of these measures (shortened semester/hours) to help parents sent a message to women about their value, and how invisible the burden of motherhood is in academia. Fear of the consequences of the lockdown and the reduction of research outputs for the academic

career was declared. To test whether the pandemic has amplified an already existing gap, we need data on publications divided by mothers, fathers, and childless academics.

Our results show that academic mothers are fearful about their future. They perceive that academic fathers and childless academics were more productive during the lockdown and may continue to be more productive until the usual childcare and educational structures are fully resumed.

In general, until gender differences are resolved and care work weighs less heavily on the shoulders of mothers, it is hard to think that this conflict will be reduced. Unless there is a reorganization of the career path evaluation, perhaps giving more weight to teaching, mothers, but in general parents, will continue to perceive themselves as disadvantaged compared to childless academics. In cases of parental leave, a temporary freeze or block on teaching is applied. Clearly, this is a measure that can hardly be taken during the coronavirus lockdown due to the short notice of the pandemic crisis, as well as the inability to reorganize teaching methods without leaving the teaching duties to rest on the shoulders of non-parents. Some additional investment in funding for those who have care duties could be an option.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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Alessandra Minello is Assistant Professor of Demography at the University of Florence. Her academic research focuses on: gender, fertility intentions, historical demography, work and education. She collaborates with the EU-FER (Economic Uncertainty and Fertility in Europe) project. She teaches Historical Demography and Demography & Tourism at the University of Florence.

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Lidia K. C. Manzo has been recently awarded with the Marie Skłodowska Curie European Individual Fellowship 2020–2022 to develop the project CITY-OF-CARE at the Department of Social and Political Sciences of the Milan University. She is interested in the application of ethnography and participatory methods in critical urban cultural studies to reinforce our knowledge of how discrimination, segregation and hegemony

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