

The Great Equalizer? Gender, Parenting, and Scholarly Productivity During the Global Pandemic

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ABSTRACT


Has the global COVID-19 pandemic negatively impacted the scholarly productivity of academics? Do gender and parenting magnify its effect? To obtain insight into the changes the pandemic has wrought in the lives and careers of women and parents in academia, we surveyed scholars in political science and international studies. The survey was in the field during the period in which many academics were experiencing shelter-at-home orders and adjusting to a new reality. It captures initial reactions to changed circumstances as well as the fears and anticipated consequences of the disruptions. We find that perceptions of a negative impact are broadly shared. The open-ended responses suggest that the pandemic may widen the gender and parent productivity gaps. Although further analysis is needed to better understand the effect of the pandemic on scholarly productivity, we conclude that the pandemic exacerbates existing structural inequalities.

Has the global COVID-19 pandemic negatively impacted the scholarly productivity of academics? Do gender and parenting magnify its effect? There is a widespread perception in the popular media, as well as in publications on higher education, that women—especially those with small children—have seen their time diverted to caregiving duties (Malisch et al. 2020; Matthews 2020; Miller 2020; Minello 2020; Windsor and Crawford 2020a). If these perceptions prove true, the pandemic's disruptions could have a long-lasting negative impact on progress for women in academia as individuals and as a group (Stack 2004).

Understanding the gendered impact of the pandemic is important: women have made progress in academia, but their proportion of the professoriate remains lower than their share of PhDs earned (American Political Science Association 2020; National Science Foundation 2019; Windsor and Crawford 2020b). Although men now more often perceive themselves as active parents—which suggests that they also may sense a negative impact on their productivity as scholars—a recent survey shows that women are still doing the bulk of care work during the pandemic (Miller 2020).

We investigated how women and men—both those who are and are not parents—perceive the pandemic's impact on their scholarly productivity. This early evaluation provides insights that may facilitate effective responses to safeguard the professional advancement of women. To obtain insight into the changes that the pandemic has wrought in lives and careers, we surveyed scholars in political science and international studies (Breuning et al. 2020). The survey was fielded in May 2020, when many academics were experiencing shelter-at-home orders and adjusting to a new reality. Hence, the survey captures initial reactions to changed circumstances as well as the fears and anticipated consequences of the disruptions. We found that substantial proportions of all respondents perceive a negative

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impact of the pandemic on their productivity and for the status of women. A review of the open-ended responses suggests that the pandemic may reinforce—and possibly widen—a parent productivity gap.

BACKGROUND

Early reports suggest that the pandemic has exacerbated existing disparities among academics (Malisch et al. 2020; Matthews 2020; Miller 2020; Minello 2020; Windsor and Crawford 2020a). Hence, women and parents run the risk of losing ground. Fattore (2018) showed that the status of women has improved but also that much work remains.

Previous surveys showed that both women and men report that academic careers negatively impact their personal life, including the choice to have fewer children and various stressors that affect their home life (Fattore 2018; Hancock, Baum, and Breuning 2013). Hancock, Baum, and Breuning (2013) showed that women more often reported that their children spend significant time in the care of others. They concluded that women often depend on such care in order to balance work and life (Hancock, Baum, and Breuning 2013; Schiebinger and Gilmartin 2010). That conclusion was supported by research demonstrating that women with young children published less often than others (Stack 2004).

This suggests that shelter-at-home orders—and the accompanying absence of childcare and school closures—likely affect women and men in different ways. Parents, in particular, face significant disruptions as they attempt to remain productive while also serving as full-time caregivers (and, in many instances, educators) for their children (Minello 2020; Windsor and Crawford 2020a). The pandemic has changed the routines of almost everyone, but not equally. For instance, there is early evidence to suggest that male scholars are submitting to academic journals at rates higher than before the pandemic and female scholars are doing so at lower rates (Flaherty 2020; Kitchener 2020; Malisch et al. 2020; Viglione 2020).

This literature, as well as early anecdotal evidence, suggests that the global pandemic is likely to influence scholarly productivity during this period and in the months—and possibly years—to come. Hence, we anticipate that female scholars, especially those who are parents, are highly likely to report that their productivity has declined during the pandemic. The impact on men is less clear: the literature and early evidence suggest that they may be more productive. However, men who have more active parenting responsibilities also might experience a decline in productivity.

DATA AND METHODS

To systematically evaluate changes in scholarly productivity as a result of the global pandemic, our team fielded a survey of scholars in the discipline between May 6 and May 30, 2020, after obtaining Institutional Review Board clearance. Respondents were recruited via emails to members of the International Studies Association and the team's social media. Although the sample is nonrandom and oversamples women, it captures a broad cross section of scholars in the discipline.

The survey yielded 1,003 respondents overall. Our analysis focused on the sample that includes 655 female and 338 male respondents. The respondents include scholars of all ranks—from graduate students to retired faculty—and almost 60% are based in the United States, with the remainder in various locations around

the globe. We include all respondents in this report. The results would be substantially similar if we had selected only US respondents, except that the sample would have been smaller (see online appendix B).

Our sample included 386 respondents who indicated that they are parents to children younger than 18 and who are living at home. Of these respondents, 239 (62%) were women and 147 (38%) were men. In most cases, the children are living with the respondent full time; this was the case for all but three respondents, all men. In addition, 28 women and 10 men are parenting without a spouse or partner. This means that only 12% of the female parents and 7% of the male parents in the sample are parenting solo. Although this category is represented by few respondents, we included it in our reporting because the effect of balancing caregiving and productivity during the pandemic might be amplified for those parenting solo.

To evaluate the impact of the pandemic on scholarly productivity, we asked respondents to indicate their agreement or disagreement with several statements. The full scale included the following options: strongly disagree, disagree, neither agree nor disagree, agree, strongly agree, and not applicable. We excluded the last response from our analyses and recoded the scales to combine “strongly disagree” and “disagree” and to combine “strongly agree” and “agree” to yield a three-point scale: (strongly) disagree, neither agree nor disagree, and (strongly) agree.

In addition, we drew on the open-ended responses, of which there were 238 total received in the survey. We collected 47 responses based on the following search terms: parent (10 responses), caregiving (nine responses), child (25 responses), and kid (three responses). Some responses were duplicates across the search terms and some were from self-identified parents; others were from non-parents broadly commenting on their perception of the circumstances facing parents and caregivers. The respondents who took the time to provide these detailed answers provided insight into the pandemic's toll on the productivity of especially women and parents.

PERCEPTIONS OF PRODUCTIVITY

We first present the descriptive statistics, which show that all respondents perceived the pandemic to have an impact on their productivity. Next, we draw on the open-ended responses to contextualize the statistics.

Descriptive Statistics

Counter to what the literature suggests, we found that women and men responded similarly to statements regarding a decline in their personal productivity as a result of the global pandemic, both now and into the future. We asked respondents to rate their agreement or disagreement with the following statement: “I am unable to write/research at home in a way similar to my productivity prior to March 2020.” This is reported as statement 1 in table 1 and reflects the respondents' assessment of their productivity in the immediate term. We also asked respondents for a similar rating of this statement: “I worry that my research productivity will decrease significantly because of the COVID-19 pandemic.” This statement indicates respondents' concerns about their productivity into the future; the results are reported as statement 2 in table 1. Both questions seek to ascertain the pandemic's perceived effect on scholars' individual productivity.

Table 1

Perceptions of Productivity and Parenting During and After the Pandemic

	All Respondents			Parents			Single Parents		
	M	F	Total	M	F	Total	M	F	Total
Statement 1: <i>I am unable to write/research at home in a way similar to my productivity prior to March 2020.</i>									
(Strongly) disagree	21.2%	21.2%	181	21.1%	22.3%	73	0.0%	17.4%	4
Neither agree nor disagree	11.3%	11.1%	95	8.6%	11.2%	34	14.3%	0.0%	1
(Strongly) agree	67.5%	67.7%	576	70.3%	66.5%	227	85.7%	82.6%	25
N	292	560	852	128	206	334	7	23	30
$\chi^2=0.0104, p=0.995$			$\chi^2=0.7364, p=0.692$			$\chi^2=4.5093, p=0.105$			
Statement 2: <i>I worry that my research productivity will decrease significantly because of the COVID-19 pandemic.</i>									
(Strongly) disagree	17.6%	17.0%	147	15.9%	16.2%	53	0.0%	21.7%	5
Neither agree nor disagree	13.1%	14.2%	118	11.9%	13.2%	42	42.9%	8.7%	5
(Strongly) agree	69.3%	68.8%	589	72.2%	70.6%	235	57.1%	69.6%	20
N	290	564	854	126	204	330	7	23	30
$\chi^2=0.2049, p=0.903$			$\chi^2=0.1420, p=0.931$			$\chi^2=5.4037, p=0.067$			
Statement 3: <i>Post-pandemic, academia will be more considerate concerning the effects of caregiving on scholar productivity.</i>									
(Strongly) disagree	49.0%	50.3%	427	50.8%	52.7%	172	42.9%	58.3%	17
Neither agree nor disagree	24.3%	26.2%	219	21.8%	25.1%	79	42.9%	16.7%	7
(Strongly) agree	26.7%	23.5%	211	27.4%	22.2%	80	14.3%	25.0%	7
N	288	569	857	124	207	331	7	24	31
$\chi^2=1.1184, p=0.572$			$\chi^2=1.2816, p=0.527$			$\chi^2=2.1585, p=0.340$			
Statement 4: <i>Women will be worse off than men in academia, post-pandemic.</i>									
(Strongly) disagree	5.8%	8.4%	65	7.0%	6.8%	23	14.3%	0.0%	1
Neither agree nor disagree	17.1%	16.1%	142	17.2%	18.4%	60	14.3%	13.0%	4
(Strongly) agree	77.1%	75.5%	655	75.8%	74.8%	251	71.4%	87.0%	25
N	292	570	862	128	206	334	7	23	30
$\chi^2=1.9094, p=0.385$			$\chi^2=0.0870, p=0.957$			$\chi^2=3.4472, p=0.178$			

The first three columns of table 1 list the responses of the full sample; the second three columns list the responses of parents; and the last three columns list the responses of those parenting solo. Results for the full sample, parents, and parenting solo all appear to be similar: for all three categories, there is little difference in the responses of women (F) and men (M). All three categories show the largest proportion agreeing with both statement 1 and statement 2. Thus, both women and men perceive the pandemic as disruptive to their ability to write and conduct research, and both are con-

cerned about their own productivity. The differences between women and men were not statistically significant. Whereas statements 1 and 2 asked respondents about individualized effects of the pandemic, statements 3 and 4 are more group focused, relating to the broader context of academia. Statements 3 and 4 ask respondents to assess the implications of the pandemic on caregiving considerations and women’s status, respectively. The findings for statement 3 are not as striking, but approximately half of the respondents (strongly) disagree that “Post-pandemic, academia will be more considerate concerning the effects of caregiving on scholar productivity.” For all groups and gender categories, the distribution between the response categories was flatter than for statements 1 and 2. Respondents did not perceive that the current disruption will yield a greater consideration of the impact of caregiving roles on the ability to be productive as a scholar. As mentioned previously, although women already face structural inequalities, across all groups, both women and men agreed that “women will be worse off than men in academia, post-pandemic” (statement 4 in table 1). Again, there

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was little difference between women and men, underscored by the lack of statistical significance.

Our findings (see online appendix A) are similar when we compared parents and non-parents (i.e., full sample, women, and men) or focused on those in more vulnerable professional positions—for example, women and men assistant professors and graduate students (i.e., all and those who are parents). The subsample sizes were sometimes small, but each exhibited the same trends: both women and men reported feeling the negative impact of this pandemic on scholarly productivity.

Patterns in the Open-Ended Responses

Open-ended responses allowed us to investigate more closely the concerns of specific groups to flesh out the results borne from the statistical analysis. Here, we were interested in those with caregiving responsibilities for underage children, who we expected to be among the more challenged during the pandemic. Of the 238 open-ended responses in our survey, 47 (19.7%) mentioned childcare and parenting specifically.¹ Further confirming the stat-

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istical results, parents are struggling with striking a balance between their work and home life.

A main theme that emerged from the open-ended responses was the difficulty in balancing work–life demands for academics with children. One respondent summarized this by stating that “academic work load has always been difficult to manage and the last couple of months it has been frankly impossible.” For respondents, the most time-consuming challenge seems to be providing at-home education for their children. Many cited the challenges of supporting their “kids’ learning while also being productive with teaching and research.” In fact, some stated that supervising their children’s distance learning takes “more time than working on my own work.”

As a consequence, respondents noted that research productivity has been reduced to little to none. Some academic parents fear that their unexpected role as a stay-at-home caregiver has jeopardized their preparedness for the job market or for obtaining grants necessary for promotion. Parents are clearly concerned about their future, as indicated by their language throughout the comments: “draining me,” “in near-despair,” “really worried,” “terrified,” and “fear my career might be doomed.” One scholar wrote: “I am terrified I will not be able to produce published research. My department is very firm about their high research standards for tenure (4 articles + 1 book) and I doubt they would consider relaxing or changing those standards.” These fears also seem to be borne out in the quantitative analysis. Another respondent agreed that the consequences of the pandemic may “permanently push me out of academia.”

In terms of gender, 13 of the 47 parent-related comments mentioned that women do and will continue to carry an outsized role for childcare, which will adversely affect their career.² For example, even with a tenure-clock extension, “I worry that as a mother of a young child, my productivity will be disproportionately affected, so it won’t matter.” Whereas some respondents believe that “men seem to be shirking caregiving duties and have seemed to be more productive,” others acknowledged that men are “taking on fully half (if not more) of the homeschooling responsibilities....”

Thus, the primary concern garnered from these responses is the concern that the parent productivity gap in academia will be perpetuated by the pandemic.

To be sure, several men acknowledged that they are sharing childcare responsibilities and are concerned that “young male faculty may get overlooked.” Some noted that they also are unsure

about how to signal these responsibilities on the job market or in their tenure files. These sentiments confirm the findings of the statistical analysis revealing that all academics who are parents harbor significant concerns.

Nevertheless, in terms of gender disparities, several respondents mentioned that the pandemic has only served to highlight—and perhaps reinforce—structural differences between women and men in academia. One respondent wrote: “I also think that the

bulk of authors in top journals will be men over the next few years, but that was true before the pandemic and is a larger structural issue.” Another respondent, who self-identified as “a chubby, old, eurowhite, cisgendered, heterosexual, vaguely culturally Jewish, atheist, anarcho-syndicalist professor,” confirmed these fears: “I think academia continues to be structurally & institutionally male-dominated & male-oriented and fear current events will make this worse. As the parent of a junior faculty member, I see this pretty up-close.” As for whether these issues will change, one respondent worried that “the propagation of stereotypes that only women engage in caregiving and that male academics should have seen a productivity boon during the pandemic will further fossilize gender roles and make it harder for male academics to engage in equal parenting and caregiving.” Thus, whereas the challenges of managing the work–life balance do seem more severe for women, it is likely that male parents also will suffer significant consequences due to the toxically masculine viewpoint that men should participate minimally in caregiving.

Overall, among parents,³ there appears to be a more general consensus regarding a productivity gap between those with and without children, which confirms the findings of the statistical analysis. Although gender disparities certainly persist, the open-ended comments confirm that the pandemic may reinforce or widen a productivity gap between those with and without children.

DISCUSSION/CONCLUSION

Our main interest was in the effects of the COVID-19 pandemic on the scholarly productivity of academics and, in particular, whether gender and parenting amplified its effects. We used survey data and open-ended responses to investigate these questions. Overall, our findings point to the negative impact of the pandemic for respondents’ research productivity and for the status of women in the profession. In addition, a review of our open-ended responses suggests a potential parent productivity gap, summarized in the following discussion.

Media reports have emphasized the negative effect of the global pandemic on the productivity of women and parents, especially female parents. However, our descriptive statistics

illustrate remarkable consistency across different groups in their reported inability to write and research, a fear of lost productivity, and little hope that academia will better address the impact of caregiving on productivity post-pandemic. Not surprisingly, most agreed that women will be worse off when the dust settles from the pandemic. Regardless of gender or whether one is a parent, there is a pessimistic outlook across these indicators.

Turning to the open-ended responses, the story continues to be one filled with concern and distress as scholars struggle to cope with managing their work and personal life during the pandemic. Yet, what we observed more clearly in the open-ended responses that we did not in the descriptive statistics is the real concern for the way in which the pandemic has put a massive strain on parents as they care for their children, and the challenges this presents for their research productivity, among other issues. Thus, the primary concern garnered from these responses is the concern that the parent productivity gap in academia will be perpetuated by the pandemic.

In summary, our analyses provide an initial snapshot of the impact of the pandemic on scholars. More research is needed to better understand the perceived effect of the pandemic on scholarly productivity, including assessing the difference between self-reported and demonstrated declines in productivity. Whereas most of the higher-education discussion centers on students and health, there has been less focus on the impact on faculty. More attention to the pandemic's fallout for faculty is warranted—whether childcare, mental health, job security, or otherwise. Sadly, as one respondent noted, even though each of us has faced a setback in some form due to the pandemic, the empathy necessary to carry us through to a kinder, more humane discipline may not materialize.

Although our descriptive statistics appear to show the pandemic to be comprehensive and indiscriminate in its negative effects across faculty, it also is clear from both the descriptive statistics and the open-ended responses that further study is needed, particularly regarding the more vulnerable groups that faced structural inequalities before the COVID-19 pandemic. In considering policy solutions, higher-education administrators should be mindful that the pandemic is not a cause of inequality but rather has exacerbated existing structural inequalities.

DATA AVAILABILITY STATEMENT

Replication materials are available on Harvard Dataverse at <https://doi.org/10.7910/DVN/A8QDOX>.

SUPPLEMENTARY MATERIALS

To view supplementary material for this article, please visit <http://dx.doi.org/10.1017/S1049096520002036>. ■

NOTES

1. Search terms: “parent,” “child,” “kid,” and “caregiving.”
2. Search terms: “mother,” “mom,” “female,” and “woman.”
3. Although we focus on parenting, we recognize that caregiving includes elder care.

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