

Business as usual? Taking stock of submissions and reviews two years after the first coronavirus lockdowns

Mobile Media & Communication
2022, Vol. 10(2) 163–173
© The Author(s) 2022



Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/20501579221080594
journals.sagepub.com/home/mmc



Veronika Karnowski 

Institut für Kommunikationswissenschaft und Medienforschung, Ludwig-Maximilians-Universität München, Germany

Thilo von Pape 

Department of Communication and Media Research (DCM), Université de Fribourg, Switzerland

Academic publishing is under increasing scrutiny for its role in reproducing gender inequality among academics (Lundine et al., 2019) and other inequalities related to such differences as authors' ethnicity and geographic context (Collyer, 2018). Not only are scholarly publications a critical success factor at various stages of the academic career (Winslow & Davis, 2016), but they also constitute the very corpus of our knowledge, which may therefore directly suffer from given biases. This reality imposes a responsibility on the institutions and individuals involved in producing and selecting academic publications to reflect on their part in perpetuating or countering existing inequalities. Beyond public academic discussions (e.g., #CommunicationSoWhite), such introspection within the field of communication research has been realized through investigations into the differential representations of genders (e.g., Trepte & Loths, 2020) and geographic contexts (e.g., Demeter, 2019) in scholarly publications. The need for such investigations has further gained urgency through the ongoing COVID-19 pandemic since disasters generally tend to increase existing cleavages (Bolin & Kurtz, 2018; Ward & Shively, 2017). Institutions and individuals have indeed reacted to the situation by producing rich evidence, from individual first-hand accounts of scholars' personal experiences, shared through social media or elaborated into auto-ethnographic studies, to analyses of massive data that was publicly available.

Corresponding author:

Veronika Karnowski, Institut für Kommunikationswissenschaft und Medienforschung, Ludwig-Maximilians-Universität München, Oettingenstrasse 67, 80538 Munich, Germany.

Email: karnowski@ifkw.lmu.de

This editorial is our contribution to further stimulate and nourish the reflection on diversity and inclusivity in general and on differential effects of COVID-19 in particular within the field of mobile communication studies: which changes in the productivity of authors and reviewers can we observe so far? How has this productivity evolved regarding scholars' gender since the pandemic's outbreak? How do different scholars seem to cope with the different working conditions? We turned these questions towards our own limited archive, in part to have them out to the public as another piece of evidence for the broader community. Our more immediate goal was to make these insights transparent to the authors and reviewers who generated the underlying data through their contributions to the journal. Ultimately, our question is also how the people involved in this journal can improve the scholarly community's equality and resilience against inequalities highlighted and reinforced by COVID-19 and how the editors can lend continued support to these efforts.

Gendered effects of the COVID-19 pandemic on scholarly productivity

Why would we expect the health crisis to affect scholars differently based on their gender? What are the developments and mechanisms that justify such expectations, beyond the above-mentioned general tendency that the less privileged are more vulnerable to disaster? The primary rationale is that the COVID-19 pandemic has vastly increased the care work demanded at home and that this care work is still primarily done by women. The first premise builds partly on the large number of people who have fallen sick from COVID-19 over the last years and needed help—but most importantly on the broad fallout of institutional structures that are expected to provide care. This involves nurseries, pre-schools, schools, and other care facilities and activities for younger people, and facilities and services dedicated to older adults and people of all ages in need of care or company. The second premise is that the lion's share of this additional care work has fallen on the shoulders of women. With few exceptions, women are traditionally expected to carry a larger share of the domestic work (Hoschild & Machung, 1989), such as tending the household and caring for children and other dependent relatives (e.g., elderly parents) (Jacobson et al., 2017). Recent data from the United Nations (UN) show that women invest about three times the amount of time that men spend on unpaid domestic and care work (UN Women & UN Department of Social and Economic Affairs [DESA], 2019). The general outcome that can be derived from these two premises also seems to emerge from recent data published by the UN: while 37% of women in 22 countries in Asia, the Pacific, Europe, and Central Asia reported that due to COVID-19 they spent more time on cooking and serving meals, this was true for only 16% of men (UN Women, 2020).

Whether and how these dynamics play out in the domain of scientific publishing has been the subject of many studies over the last two years. In their overall volume, these publications echo the rush with which biologists and epidemiologists pushed their findings on the virus itself to the public, which some have characterized as a “paper-demic” on its own (Dinis-Oliveira, 2020, 174). But specific patterns appear to emerge from the

various methodological approaches and corpora. While these patterns are still subject to change by the new evidence, which is added through fresh studies daily, we provisionally identify some critical insights in attendance of systematic reviews.

Bibliometric analyses across a wide range of academic fields brought the following observations:

1. Female authorship in preprints, working papers, and discussion papers has dropped significantly starting in March 2020 (e.g., Amano-Patiño et al., 2020; Muric et al., 2021).

2. This drop was more pronounced for the role of the first author. This has been interpreted as a sign that seniority moderates the effect of the lockdown on the publications of male and female authors, first authors generally being in a more junior position (Vincent-Lamarre et al., 2020).

3. The effects seem particularly strong for publications from science, technology, engineering, and mathematics (STEM) as well as medicine. They are stronger for research directly related to COVID-19, which was in our timeframe necessarily ad-hoc research. However, they persist when controlling the general overrepresentation of male scholars in these domains and can also be observed in specific fields within the social sciences, such as economics and finance (Amano-Patiño et al., 2020; Kruger et al., 2020). Yet there are some smaller-scale ad-hoc investigations by journal editors or leaders of scientific associations into the papers submitted to specific journals which have shown no gender-related changes during the pandemic (Biondi et al., 2021; Dolan & Lawless, 2020; Forti et al., 2021; Fox & Meyer, 2021)—or a limited and conditioned change that only applied to single authorship (Dolan & Lawless, 2020).

Survey data suggest that a drop in publication output can be explained by a decline in hours dedicated to work among female scholars, scholars caring for young children, and scholars in early to mid-career positions, all of which tend to correlate (Deryugina et al., 2021; Krukowski et al., 2021). The auto-ethnographic studies richly illustrate the tensions behind these correlations but also highlight other dynamics at play, such as short-term compensation tactics: privileging immediate publication obligations or opportunities over other, often longer-term engagements (conceptualizing research, reviewing), and shifting work to time slots traditionally reserved for caretaking and personal wellbeing, such as the weekend (Plotnikoff et al., 2020).

The case of *Mobile Media & Communication*

Our analysis builds on a total of 1,135 original article submissions which *Mobile Media & Communication* has received from its founding in 2012 until September 30, 2021. It thus covers periods from before and during the pandemic. We extracted information on submission time and date, processing time, and submitters from *Mobile Media & Communication*'s editing system for all these articles. A total of 2,536 authors had submitted the 1,135 original submissions. Unfortunately, there is no information on authors' gender registered in the editing system—a desideratum to which we will return later. While machine learning-based tools for the generic determination of gender on the basis of first names exist and have shown a satisfactory level of reliability for massive data sets (Sebo, 2021), we have opted to research and code scholars' gender individually

by student assistants to optimize the reliability in our limited sample. These searches drew on publicly available data (such as pictures or short bios) that could be found on scholars' institutional profiles and other websites (e.g., Forti et al., 2021)¹.

To check for gendered influences of the pandemic on the number of manuscripts submitted as well as the success of these manuscripts, we first analyzed our data based on all individual authors' gender. Second, we also categorized all original submissions into three categories: female-led teams (including female single authors and all-female teams), male-led teams (including male single authors and all-male teams), and "cannot be determined" whenever our student assistants had not been able to deduce authors' gender based on their extensive web search.

In addition to this information on (original) submissions, we also pulled data on all review invitations we had sent out since the founding of our journal in 2012 until September 30, 2021, from the editing system. These have totaled to 3,032 review invitations we have sent out. For all review invitations, we noted whether they had been accepted or not and how long it had taken the reviewer to complete the review. Again, the system does not register reviewers' gender, so the two student assistants also manually coded reviewers' gender based on an extensive web search. To account for the pandemic having started to impact most academics' lives in March 2020 due to the start of shelter-in-place orders across many countries (Beerling, 2021; Biondi et al., 2021; Fox and Meyer, 2021), in the following, we will not analyze calendar years, but rather years will always start in March and end in February.

Considering first the evolution of submissions by different authorship categories over time, we do see a bit of fluctuation during the first years. Still, since 2016 the ratio of male-led and female-led author teams had been rather stable at around 50% each (see Figure 1). However, there was a slight increase in male-led authorship teams in the second pandemic year (2021). This pattern shows similarly when considering the gender of all authors of all submissions over time (see Figure 2).

Given the small scope of this increase, it is hard to tell whether this is the start of a trend—also given that we effectively have coded only seven months for this second pandemic year. It will be up to continued monitoring to see whether this trend will solidify. This goes along with the fear, expressed by many, that gendered effects of the pandemic on scholarly activity will only manifest in publication output in the long run as it might mainly have been fieldwork and data-gathering that had been affected, only manifesting in a decrease in publications one, two, or three years later (see Plotnikoff et al., 2020).

In the next step, we checked the success of original submissions over time (see Figures 3 and 4), again split by authorship categories and all individual authors' gender. The years depicted here refer to the year of submission of the original manuscript. Across all three categories of success (acceptance, rejection, and desk rejection, i.e., reject—inappropriate), we see quite some fluctuation concerning the shares of different authorship categories and of all individual authors' gender. However, a clear trend distinguishing the pandemic years 2020 and 2021 is not visible. There is a slight increase in the share of male-led teams among accepted papers in 2020 compared to 2019 that might hint at a gendered effect of the pandemic—but again, we will need to continue to monitor whether this trend will solidify. Another tendency worth noting beyond the impact of the pandemic is the increasing number of male-led teams among accepted papers ever since 2018.²

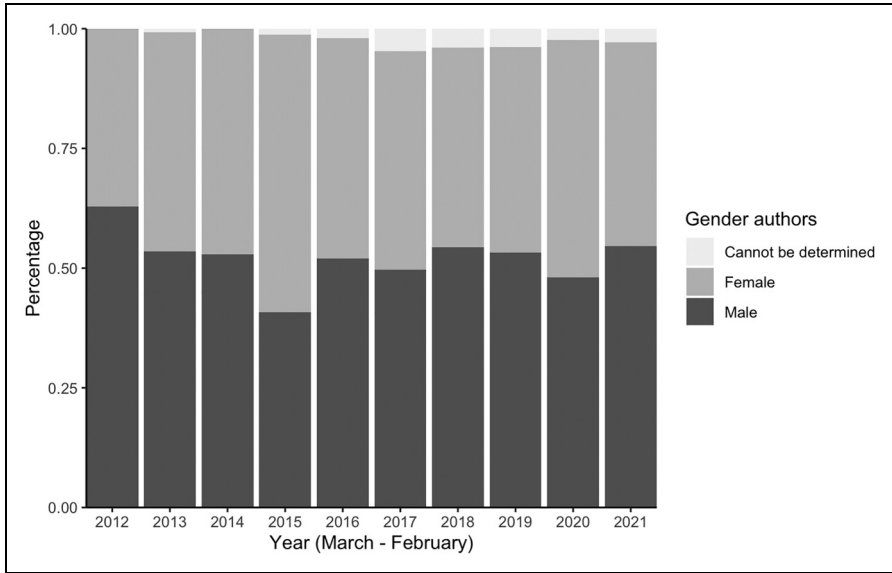


Figure 1. Percentage of authors' gender of original submissions over time

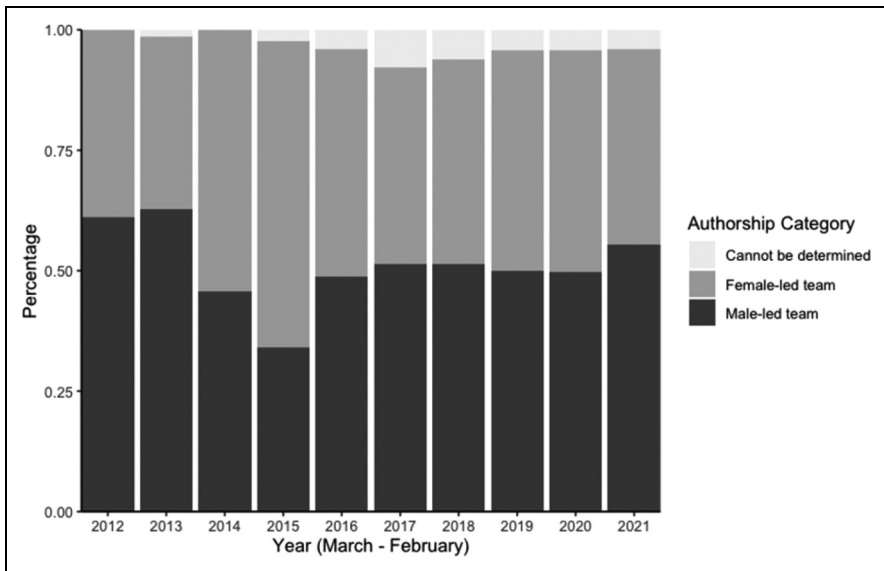


Figure 2. Percentage of authorship categories of original submissions over time

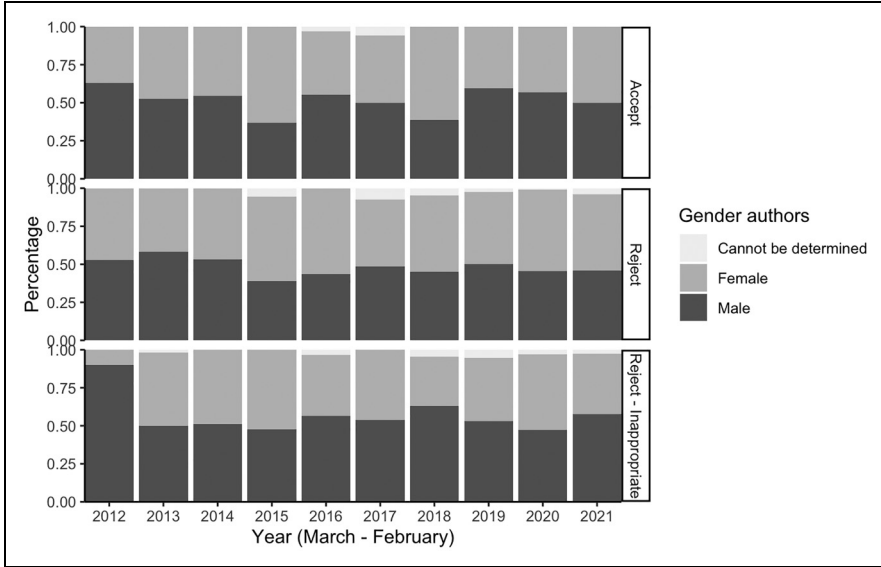


Figure 3. Success of original submissions by individual authors' gender over time

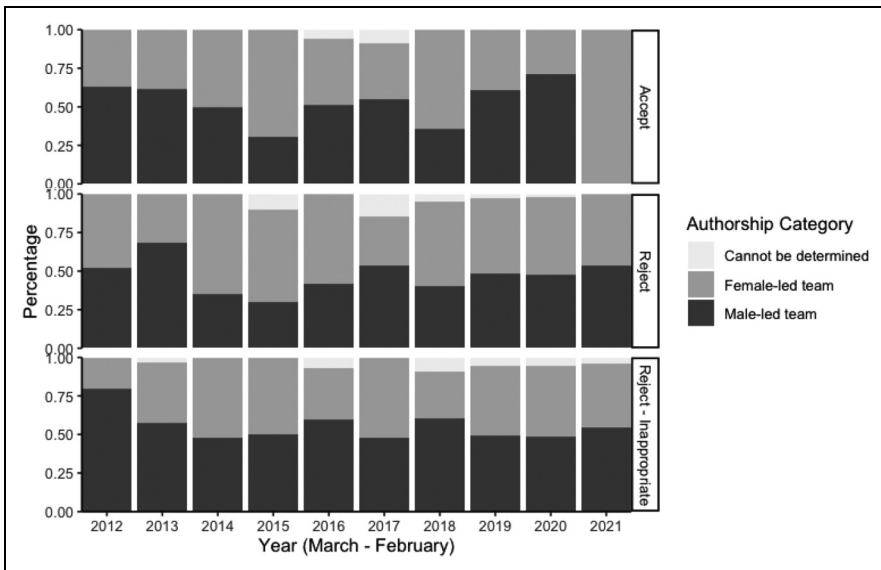


Figure 4. Success of original submissions by authorship category over time

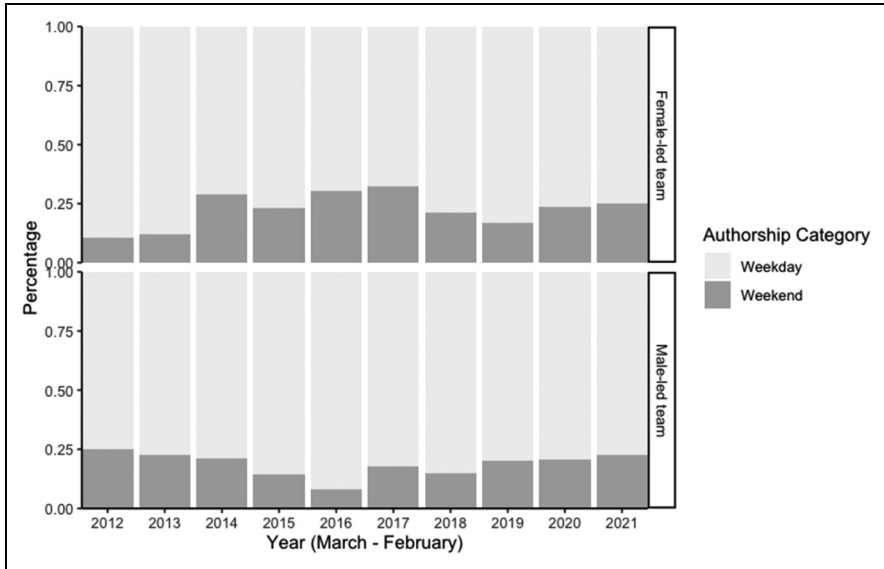


Figure 5. Amount of weekday and weekend submissions by authorship category over time

Finally, we considered whether female lead-authors compensated for the time strains experienced during the pandemic by shifting work on publications to the weekend and thus submitting on the weekend (see Figure 5). Over time, there are again some fluctuations regarding the share of papers submitted on the weekend—both for male- and female-led teams. However, there is no meaningful difference and no visible increase in weekend submissions in the pandemic years 2020 and 2021 beyond the fluctuations we experienced in the previous years.

Regarding reviewers (see Table 1), the share of male and female reviewers among invited and acting reviewers (i.e., those who had accepted our invitation to review) fluctuated around 50% for several years. This hasn't changed for the pandemic years 2020 and 2021. Hence, we cannot find any patterns of female reviewers rejecting our review invitations more often during this time, for example, to prioritize their own publishing work as suggested by Plotnikoff et al. (2020). Concerning the turn-around time for reviews, we see three and four weeks as the average reviewing time since the launch of *mobile media & communication*. This has not changed in 2020 and 2021; there was even a bit of a decrease compared to 2019.

Comparing male and female reviewers, again since the very beginnings of *Mobile Media & Communication*, we see that male reviewers for most years tend to hand in their reviews a tiny bit quicker than their female counterparts. However, this slight difference has also not changed for the pandemic years 2020 and 2021, again providing us with no hints for a gendered impact of the pandemic on reviewing times.

Table I. Peer reviewer activity for *Mobile Media & Communication* (2012–2021)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Invited reviewers	124	217	336	208	276	350	461	316	506	237
Male	81 (65.3%)	123 (56.7%)	200 (59.5%)	108 (51.9%)	141 (51.1%)	157 (44.9%)	202 (43.8%)	147 (46.5%)	250 (49.4%)	120 (50.6%)
Female	43 (34.7%)	94 (43.3%)	135 (40.2%)	100 (48.1%)	132 (47.8%)	192 (54.9%)	259 (56.2%)	169 (53.5%)	256 (50.6%)	115 (48.5%)
Acting reviewers	76	138	193	128	157	204	228	168	264	129
Male	48 (63.2%)	77 (55.8%)	119 (61.7%)	70 (54.7%)	86 (54.8%)	85 (41.7%)	96 (42.1%)	74 (44.0%)	132 (50.0%)	66 (51.2%)
Female	28 (36.8%)	61 (44.2%)	73 (37.8%)	58 (45.3%)	69 (43.9%)	118 (57.8%)	132 (57.9%)	94 (56.0%)	132 (50.0%)	63 (48.8%)
Average days from invitation to complete review	21.0	19.9	22.4	25.3	25.8	24.5	26.5	28.1	26.8	23.0
Male reviewers	20.7	20.5	21.4	19.0	24.0	20.8	23.5	28.4	25.9	21.3
Female reviewers	21.5	19.2	24.0	32.8	27.8	27.1	28.6	27.8	27.7	24.4

Again, all years are considered March to February. The shares of male and female reviewers will in some years not add to 100% as we were not able to determine the gender of some reviewers.

Conclusion and call to action

After this deep look into our records, we find ourselves in the same position as other editors who have done this exercise before. To quote from Dolan and Lawless' (2020) editorial for the *American Journal of Political Science*: "It wouldn't be surprising if the gender gap in manuscript submissions grew during this time. The data reveal that it hasn't." So, considering our data on gender and reviewing and submission practices, we see 'Business as usual' for *Mobile Media & Communication* during the past two pandemic years, 2020 and 2021. But, how to interpret these findings, and which conclusions and recommendations to draw?

First of all, we need to acknowledge that we are only analyzing the case of one specific journal, *Mobile Media & Communication*. Given this focus on only one journal, submission numbers per year are too small to identify particular patterns in submissions, such as the rise or decline in female single-author submissions. Second, this journal was founded only 10 years ago; hence, our study period reflects a phase of constant growth for the journal, including the considerable push through its first Social Sciences Citation Index (SSCI) ranking in 2017. This growth is embedded in the broader establishment of the entire field of mobile communication studies. These dynamics might mask other trends in submissions or reviewing practices. Third, we do not have any concrete expectations for the delay of the effect on publication outcomes. Several authors (e.g., Biondi et al., 2021; Fox & Meyer, 2021; Plotnikoff et al., 2020) argue that we will only see effects in accepted and published articles within years after the start of the pandemic.

So, what can we learn so far? First and foremost, we, both in the sense of editors of *Mobile Media & Communication* but also the scholarly community at large, need to continue and get better at monitoring and mitigating inequalities in academic publishing following Fox and Meyer's (2021, p. 9) recommendation: "It is thus critical that academic institutions and scholarly societies develop the infrastructure—both procedures and policies—for addressing the various inequalities that have been and will continue to be created by this pandemic." As a tiny first step, we at *Mobile Media & Communication* will revise the personal information authors and reviewers need to provide, beginning with their gender identification³. This will help us in continuously monitoring potential inequalities. Lastly, we ask all other editors in the broader field of media and communication to look into their submission data. We need more empirical evidence across various journals to better assess the impact of COVID-19 on publishing and reviewing across the broader field. Such evidence will also permit us to institutionalize monitoring and enable mitigation of the multiple inequalities in academic publishing.

Acknowledgments


We want to thank Nariman Sawalha and Nora Wildenstein for their help in conducting the extensive manual coding of authors' and reviewers' gender. We also want to thank Didem Ozkul, Jakob Ohme, Rich Ling, Steve Jones, and Sven Jöckel for their feedback on this editorial note.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iDs

Veronika Karnowski  <https://orcid.org/0000-0002-2138-255X>

Thilo von Pape  <https://orcid.org/0000-0003-0822-313X>

Notes

1. We acknowledge that this process of coding gender in a binary way based on pronouns and pictures (if no pronouns were available) is reductionist and non-inclusive. We will do better in the future, based on authors' and reviewers' self-assessment of gender beyond the binary female/male distinction.
2. Please note that the shares of accepted papers in 2021 are not yet meaningful, as only three papers originally submitted in 2021 had been accepted by September 30th, 2021.
3. This self-assessment of gender identification will of course be more inclusive and hence go beyond the binary categories of male and female to which we had to restrict this first analysis.

References

- Amano-Patiño, N., Faraglia, E., Giannitsarou, C., & Hasna, Z. (2020). *The unequal effects of COVID-19 on economists' research productivity*. Cambridge-INET Working Paper WP2022. <https://doi.org/10.17863/CAM.57979>
- Beerling, D. (2021). Impact factors and COVID-19. *Biology Letters*, 17(8), 20210391. <https://doi.org/10.1098/rsbl.2021.0391>
- Biondi, B., Barrett, C. B., Mazzocchi, M., Ando, A., Harvey, D., & Mallory, M. (2021). Journal submissions, review and editorial decision patterns during initial COVID-19 restrictions. *Food Policy*, 105, 102167. <https://doi.org/10.1016/j.foodpol.2021.102167>
- Bolin, B., & Kurtz, L. C. (2018). Race, class, ethnicity, and disaster vulnerability. In Rodríguez, H., Donner, W., William, T., & Trainor, J. (Eds.), *Handbook of disaster research* (pp. 181–203). Springer.
- Collyer, F. M. (2018). Global patterns in the publishing of academic knowledge: Global north, global south. *Current Sociology*, 66(1), 56–73. <https://doi.org/10.1177/0011392116680020>
- Demeter, M. (2019). The winner takes it all: International inequality in communication and media studies today. *Journalism & Mass Communication Quarterly*, 96(1), 37–59. <https://doi.org/10.1177/1077699018792270>
- Deryugina, T., Shurchkov, O., & Stearns, J. (2021). COVID-19 disruptions disproportionately affect female academics. *AEA Papers and Proceedings*, 111, 164–168. <https://doi.org/10.1257/pandp.20211017>
- Dinis-Oliveira, R. J. (2020). COVID-19 research: Pandemic versus “paperdemic”, integrity, values and risks of the “speed science”. *Forensic Sciences Research*, 5(2), 174–187. <https://doi.org/10.1080/20961790.2020.1767754>
- Dolan, K., & Lawless, J. L. (2020, April 20). It takes a submission: Gendered patterns in the pages of AJPS. *American Journal of Political Science Editor Blog*, <https://ajps.org/category/ajps-editor-blog/>

- Forti, L. R., Solino, L. A., & Szabo, J. K. (2021). Trade-off between urgency and reduced editorial capacity affect publication speed in ecological and medical journals during 2020. *Humanities and Social Sciences Communications*, 8(1), 1–9. <https://doi.org/10.1057/s41599-021-00920-9>
- Fox, C. W., & Meyer, J. (2021). The influence of the global COVID-19 pandemic on manuscript submissions and editor and reviewer performance at six ecology journals. *Functional Ecology*, 35(1), 4–10. <https://doi.org/10.1111/1365-2435.13734>
- Hoschild, A., & Machung, A. (1989). *The second shift: Working parents and the revolution at home*. Viking.
- Jacobson, J., Lin, C., & McEwen, R. (2017). Aging with technology: Seniors and mobile connections. *Canadian Journal of Communication*, 42(2), 331–357. <https://doi.org/10.22230/cjc.2017v42n2a3221>
- Kruger, S., Maturana, G., & Nickerson, J. (2020). How has COVID-19 impacted research productivity in economics and finance? Available at SSRN: <https://ssrn.com/abstract=3745226>.
- Krukowski, R. A., Jagsi, R., & Cardel, M. I. (2021). Academic productivity differences by gender and child age in science, technology, engineering, mathematics, and medicine faculty during the COVID-19 pandemic. *Journal of Women's Health*, 30(3), 341–347. <https://doi.org/10.1089/jwh.2021.0238>
- Lundine, J., Bourgeault, I. L., & Glonti, K., Hutchinson, E., & Balabanova, D. (2019). “I don’t see gender”: Conceptualizing a gendered system of academic publishing. *Social Science & Medicine*, 235, 112338. <https://doi.org/10.1016/j.socscimed.2019.112388>
- Muric, G., Lerman, K., & Ferrara, E. (2021). Gender disparity in the authorship of biomedical research publications during the COVID-19 pandemic: Retrospective observational study. *Journal of Medical Internet Research*, 23(4): e25379. <https://doi.org/10.2196/25379>
- Plotnikof, M., Bramming, P., Branicki, L., Christiansen, L. H., Henley, K., Kivinen, N., Resende de Lima, J. P., Kostera, M., Mandalaki, E., O’Shea, S., Özkazaç-Pan, B., Pullen, A., Stewart, J., Ybema, S., & van Amsterdam, N. (2020). Catching a glimpse: Corona-life and its micro-politics in academia. *Gender, Work & Organization*, 27(5), 804–826. <https://doi.org/10.1111/gwao.12481>
- Sebo, P. (2021). Performance of gender detection tools: A comparative study of name-to-gender inference services. *Journal of the Medical Library Association*, 109(3), 414. <https://doi.org/10.5195/jmla.2021.1185>
- Trepte, S., & Loths, L. (2020). National and gender diversity in communication: A content analysis of six journals between 2006 and 2016. *Annals of the International Communication Association*, 44(4), 289–311. <https://doi.org/10.1080/23808985.2020.1804434>
- UN Women (2020). From insights to action: Gender equality in the wake of COVID-19. UN Women. <https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2020/gender-equality-in-the-wake-of-covid-19-en.pdf?la=en&vs=5142>
- UN Women & UN Department of Social and Economic Affairs (2019). Progress on the Sustainable Development Goals: The gender snapshot 2019. UN Women and UN DESA. <https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2019/progress-on-the-sdgs-the-gender-snapshot-2019-two-page-spreads-en.pdf?la=en&vs=5814>
- Vincent-Lamarre, P., Sugimoto, C. R., & Larivière, V. (2020, May 19). The decline of women’s research production during the coronavirus pandemic. Preprints analysis suggests a disproportionate impact on early career researchers. *Nature Index*. <https://www.natureindex.com/news-blog/decline-women-scientist-research-publishing-production-coronavirus-pandemic>
- Ward, P. S., & Shively, G. E. (2017). Disaster risk, social vulnerability, and economic development. *Disasters*, 41(2), 324–351. <https://doi.org/10.1111/disa.12199>
- Winslow, S., & Davis, S. N. (2016). Gender inequality across the academic life course. *Sociology Compass*, 10(5), 404–416. <https://doi.org/10.1111/soc4.12372>