The helpers, the doers, and the ones left behind: Reflections on the gendered dimension of academic citizenship in Dutch academia

Luana Russo and Danai Petropoulou Ionescu

Abstract

Gender disparities in academia are pervasive. From the well-known 'leaky pipeline' phenomenon, which demonstrated the progressive decrease of women academics from occupying senior scientific positions, to the gender pay gap, women in academia do not enjoy a level playing field. Across the world, women have a harder time climbing the academic ladder, due, in part, to policies that discriminate towards people with caring responsibilities (most of whom, albeit not all, are women), general gender-based biases, or a substantial gender pay gap. An additional yet important aspect of the evident gender disparities in academia can be attributed to the engagement of what is commonly known as citizenship behaviours, such as taking part in academic committees or mentoring colleagues. Studies have shown that women engage in such activities at a higher rate than their male counterparts, leaving less time for research and, ergo, widening the academic gender gap in the long term. Based on findings from a study conducted at Maastricht University, the Netherlands, this essay aims to highlight the gender disparities in academic citizenship behaviours and suggests that more attention should be paid to the distribution of service work at the department, faculty, and university levels, with a specific focus on gender equity. The overall aim here is to provide a reflection on how structural and cultural discrimination in the internal society of universities can affect why, how, and to what extent academics engage with citizenship behaviours, and propose an approach to study the gendered dimension of academic service work.

Keywords: service work; gender equity; academic citizenship; recognition and rewards

Introduction

We have all been there—agreeing to supervise an extra student, helping out a colleague who fell ill, joining a task force to improve the academic experience of our staff and student communities, volunteering to attend an extra meeting. Certainly, there is enormous value to this work. Without academics engaging in academic citizenship behaviours as such—no matter the motivation—nearly all aspects of academic life would be severely compromised. It would affect education (who will grade that extra thesis that was not foreseen?), but also research (an example that encompasses all disciplines is reviewing papers). Often viewed as a duty within the 'internal society' of the university, academic citizenship and service-oriented behaviours are fundamental values of academic life, such as of collegiality and community. Yet, while clearly an essential part of academia, citizenship behaviours are not always recognised, rewarded, or equitably distributed. For instance, throughout the past few decades, studies have shown that women tend to engage in such activities at a substantially higher rate than their male counterparts (Beauregard, 2012; Diefendorff et al., 2002; Eagly & Crowley, 1986; Guarino & Borden, 2017), often assuming the role of the 'caretaker' or 'professor mom' (cf. Docka-Filipek et al., 2023). As is to be expected, this leaves some women with much less time for research and may end up being potentially harmful for their career, personal development, and wellbeing—especially when academic career trajectories are not level or equitable to begin with.

Certainly, citizenship tasks are not all the same. Some tasks are recognised and appreciated—for instance, serving on a faculty council or on some high-level committees. Other tasks are prestigious or very visible (for instance, being an editor of an academic journal), and could even be very beneficial for one's career. But many important tasks that do not enjoy the same (or any) prestige, such as mentoring a student or colleague, often fall through the cracks. This situation becomes even more complicated once we take the gendered nature of academic citizenship into account. It is well known that gender disparities in academia remain pervasive (cf, Bozzon et al., 2019; Casad et al., 2020; Harris & González, 2012; Le Feuvre et al., 2019). From the much-reported 'leaky pipeline' phenomenon, which demonstrated the progressive decrease of women academics from occupying senior scientific positions (Resmini, 2016), to the gender pay gap (de Goede et al., 2016), women in academia do not enjoy a level playing field. In the last few years, the gender inequalities of the academic field have only been exacerbated by the COVID-19 pandemic, as women researchers have been conclusively shown to publish less from the very start of the pandemic measures such as school closures or lockdowns (see for instance, Flaherty, 2020a; Flaherty, 2020b; Squazzoni et al., 2020; Viglione, 2020) halting their career perspectives.

This is partly due to an academic culture that focuses on research performance and output while effectively relying on unrecognised and unrewarded citizenship behaviours. What we are effectively left with is a culture of rewarding the doers, relying on the helpers, and leaving some behind. This dynamic reinforces the general idea that women are primarily there to serve as 'helpers,' while men get to be 'doers' (Flaherty, 2018). Of course, women are often doers and men take on the role of helpers. Yet, the general trend persists. Building on this idea and drawing on insights from the study we conducted at Maastricht University, *Helpers and Doers: the role of service work in academia*, this essay aims to highlight the gender disparities in academic citizenship behaviours and suggests that more attention should be paid to the distribution of service work at the department, faculty, and university levels, with a specific focus on gender equity. The aim here is to provide a reflection on how the (often hidden) structural and cultural disparities around gender equity and equality can affect why, how, and to what extent academics engage with citizenship behaviours. In doing so, following the design of our research, we also propose an approach to study the gendered dimension of academic service work.

The gendered dimension of academic citizenship

The subject of women's presence in science and academia is one that comes up time and time again in both academic and public discourses. While considerable policy efforts have been made to close the gender gap in science and research, data from across the world consistently show that women are progressively underrepresented in key positions of the academic hierarchy (Bisello & Mascherini, 2017; LNVH, 2022; Resmini, 2016). The pervasiveness of (conscious and unconscious) gender bias and discrimination towards women in all aspects of academia—from recruitment to authorship and funding—is well researched and has been conclusively documented to negatively impact the career success and career progression of women in academia. According to a study by the Dutch Network of Women Professors (LNVH), while women and men in the Netherlands participate in higher education equally at the bachelor and master's levels, the number of women occupying professorships continuously decreases while the number of men in such positions increases steadily throughout the career trajectory (LNVH, 2022).

This so-called 'leaky pipeline' phenomenon can be attributed to a number of factors relating to different facets of gender discrimination that can take different forms. For instance, reports reveal that women are less likely to receive extra financial rewards (e.g., for extraordinary performance) and that women in Dutch academia have less time for research than their male colleagues, spend more time

on teaching activities, and receive less resources for managing their work (e.g., an individual office, assistants), despite being equally likely to negotiate over work related benefits (van Veelen & Derks, 2019). Even after controlling for factors like date of promotion, nationality, and family status, women spend on average 70 hours (i.e., circa two workweeks) less on research and up to 70 hours more on teaching than their male colleagues. In the long run, the accumulation of strictly non-research-related tasks—like teaching—creates additional barriers and contributes to the mental and organisational workload of women in academia. These factors can then significantly undermine women academics' careers, making it increasingly difficult for them to climb up the career ladder and ultimately 'plug' the pipe.

Now, what is the role of academic citizenship in this? Let us start from the basics. When talking about academic citizenship behaviours in the context of this paper, we refer to volunteering and helping behaviours that are quantitatively or qualitatively not part of one's formal contract. This includes behaviour such as mentoring a struggling colleague or student, taking an extra meeting, contributing to the development of university policy, or supervising an additional student. In fact, such behaviours—often emerging under the guise of collegiality—speak to the core ideals of higher education and are reinforced by being integral to each institution's organisational structure and culture (Macfarlane, 2016). As Deal and Kennedy (1982) put it, it speaks to 'the way we do things around here' (p. 4). It follows that, often times, not following these norms—for instance, by an academic 'new-comer'—can very easily be attributed to a potential lack of collegiality or even a missing sense of community. While such behaviours are indeed a very common part of academia and, without question, bring about several common goods to the academic community, research also suggests that engaging in academic citizenship behaviour can impact one's career progression. This is more so the case for women academics, who, while already facing challenges when it comes to career progression and success, are still shown to be more likely to engage in volunteering and helping behaviours (Beauregard, 2012; Diefendorff et al., 2002; Guarino & Borden, 2017), partly due to commonplace ideas about gender roles and gendered behaviours. Although research findings paint a clear picture regarding the existence of gender disparities in career success and the distribution of work tasks in academia, it is less clear what the underlying cause of such disparities are or how to overcome them.

One reason why women are much more likely to engage in volunteering and helping behaviours at work may be due to social and organisational gender norms and related expectations towards women as caregivers—that is, being kind, understanding, considerate and helpful to others (Babcock et al., 2022; Heilman & Chen, 2005). These norms may be exacerbated in contexts of high pressure such as periods of accreditation, or exogenous crises. For example, a clear consequence of

COVID-19 was that whilst women submitted fewer manuscripts, they were found to serve as reviewers more often than men (Squazzoni et al., 2020). In the European context, this was recently also recognised by the European Commission in an independent expert report of the Directorate-General for Research and Innovation, which focused on the gendered impact of the COVID-19 pandemic in academia (European Commission, 2023). The study reports that such norms translated into a great burden of care for women towards peers and students, ultimately resulting in a heavy impact on their own productivity (European Commission, 2023; Staniscuaski et al., 2021). Of course, a closer look will show us that such effects were higher for racialised women and women belonging to one or more marginalised communities (Docka-Filipek et al., 2023; Staniscuaski et al., 2021). In this sense, the pandemic brought to the forefront—and arguably heightened— existing inequalities in the day-to-day operations of academia, and specifically teaching and service, which are already disproportionately carried by women (European Commission, 2023).

While there are a number of 'red flags' that can be identified here, in the current system of evaluation of academic career trajectories in the Netherlands, which primarily focuses on research output, engaging in service work at a disproportionate level can have a detrimental effect for women academics. What can be easily concluded is that due to the uneven distribution of service work, men have more time at their disposal to dedicate to research-oriented work, while women take on more teaching activities or administrative tasks, often at the expense of their research (van Veelen & Derks, 2019), which severely affects their productivity and, in turn, reduces their chance of getting promoted and 'plugging' the leaky pipeline. Furthermore, because service behaviours are highly beneficial for organisational functioning, individual detrimental consequences for women are often overlooked or happily accepted by employers. Further reinforcing these norms, women who go against gender stereotypes and refuse to act as 'helpers' will be punished more than men who fail to enact such service behaviours (Harris, 1992); thus, pushing women into a double bind. With regard to concrete situational influences of gender differences on service behaviour (e.g., situational pressures in team meetings), knowledge is completely lacking at this point, though some initial research steps are starting to take shape.

In a very recent study, Babcock et al. (2022) extensively examine the various types of dead-end jobs women often end up with in academia (but also in other fields). They noticed that women more often systematically engaged in what they call 'non-promotable tasks' than their male colleagues, which, as a result, made them less promotable in the medium-long term. In line with previous research, they also find that women are engaging more in such tasks not because they enjoy it or they are better at it, but simply because there is an expectation that they will do it.

They found that a woman accepting a 'non-promotable task' has a neutral effect; that is, she is not perceived more positively or negatively. However, when she refuses, she is perceived more negatively. By contrast, a man refusing to perform such a task produces a neutral effect. This finding demonstrates that men are afforded more freedom to refuse time-consuming, non-promotable tasks without creating any negative effect for them, raising a number of questions about how we can perceive, study, and engage with service work as academics in a manner that promotes the equitable distribution of work in the university. How can we find the balance between doing and helping?

To help or not to help? Four reflections on academic citizenship in Dutch academia

While the literature and abundance of anecdotal evidence make it crystal clear that engaging with academic citizenship has a strong gendered character, there is still a lack of empirical evidence on how this looks in practice. Building on research conducted in US academia, and in the same spirit of Babcock et al. (2022), we set out to investigate whether service work played a role in a European context too. We already know that, in Europe, women academics earn less than their male colleagues, receive less resources, and fewer research grants (European Commission, 2021; LNVH, 2022). Building on this, we decided to empirically research whether in the university in which we are based, Maastricht University (UM), we could observe more women engaging in service behaviour, and whether this had an effect on their career. The aim of this exploration was to meaningfully contribute to the empirical understanding of the gendered dimension of service work, but also to identify potential policy threats and opportunities related to this in the context of our university.

Figure 1[1] shows that, at Maastricht university, following a widespread pattern, as academic ranks increase, the representation of women steadily decreases. Our field work took place in the spring 2020 (thus, during the pandemic). We decided to employ both a survey[2], open to all UM employees engaging in academic activities, in-depth semi-structured interviews,[3] and a diary study. The survey was a good instrument to give everybody an opportunity to express their view on the

---

[1] These figures have been provided by the Human Resources office of Maastricht University. Own elaboration.

[2] In the survey, we collected sociodemografic individual information along with academic rank, faculty, function.

[3] The interview codebook, including the questions and structure of the interview, can be made available upon request to the authors.

topic, but its results need to be interpreted keeping in mind that they cannot be considered representative. Three main limitations need to be taken into account. First, we did not target a representative sample, and all employees engaging in academic work could participate. So, the final pool of respondents is a convenience sample, as answering the survey was entirely voluntary. Thus, a self-selection bias is to be expected: those who deem the topic important (most probably those engaging in service work in the first place) are more likely to answer the questionnaire. Second, several questions on service work could induce the respondent to answer in a socially desirable way (see, for example, Sjöström & Holst, 2002). Third, several questions asked the respondents to self-assess about tasks they performed, which can cause both underestimation and overestimation (see Keane & Griffin, 2016). Unsurprisingly, we had a relatively low number of respondents (N=168, against a population of about 1600 academic members of staff), of which 70% were women.
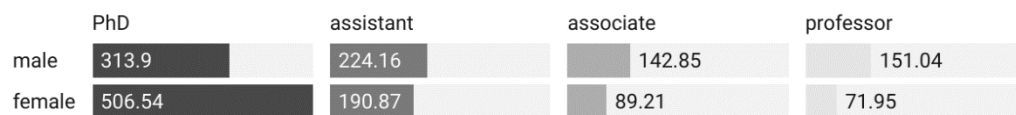
	PhD	assistant	associate	professor
male	313.9	224.16	142.85	151.04
female	506.54	190.87	89.21	71.95

Figure 1. *Distribution of positions (FTE) across gender*

Figure 2 shows the distribution of respondents across different positions. If we compare Figure 2 with the numbers illustrated in Figure 1, it is immediately noticeable that our survey overrepresented assistant professors, and that PhD students were the most underrepresented. It clearly emerges that assistant professors—that is, the lower level of professorship one can hold in the Netherlands—are the group who answered the questionnaire at the highest rate, followed by colleagues with teaching-only positions.
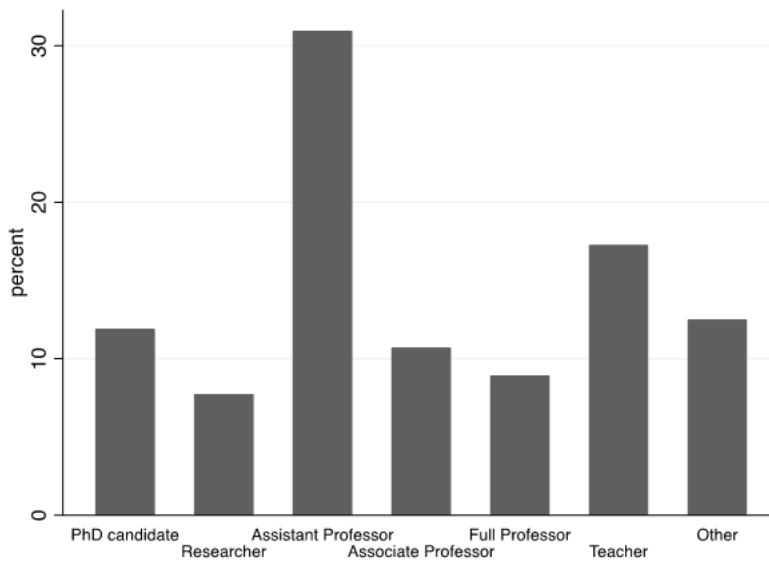
Figure 2. *Distribution of survey respondents*

To overcome the limits of the survey, and to collect articulated answers, we also conducted two preparatory focus group interviews and thirty in-depth interviews, which were recorded. To ensure that views on the topic were represented across faculties and levels of seniority, we selected colleagues by using the survey (at the end of the questionnaire respondents could signal availability to participate in the interviews, which were conducted virtually). Although the survey and the interviews focused on the same topic, they had different objectives. The survey aimed at collecting a broader picture, including whoever wanted to contribute to the topic, and have a wider distribution of descriptive across gender and academic rank. On the other hand, the interviewees were selected on the basis of an equal distribution of rank and gender across faculties. The interviews were aimed at understanding the functioning of the university, and the implications of it in the role of service work. The survey was conducted online in March 2021, whilst the interviews were conducted via Zoom between April and May 2021. In preparation for the interviews, participants were asked to reflect and think about their engagement with service work at Maastricht University, as well as the general climate around the importance of academic citizenship in their organisational context (e.g., faculty, department, etc.). Table 1 shows the distribution of interviews per faculty, gender and seniority.

Table 1

Distribution of interviews per faculty

Faculty / Gender	HL		UHD		UD		PhD		Lecturer		Total
	W	M	W	M	W	M	W	M	W	M	
FASoS	1	1			1				1	1	5
FoL			1		1		1		1		4
SBE	1				1	1					3
FSE		1		1	1	1			1	1	6
FPN			1		1	1	1				4
FHML		1	1	1	1	1	2	1			8
Total	2	3	3	2	6	4	4	1	3	2	30

*FASoS: Faculty of Arts and Social Sciences; FoL: Faculty of Law; SBE: School of Business and Economics; FSE: Faculty of Science and Engineering; FPN: Faculty of Psychology and Neuroscience; FHML: Faculty of Health, Medicine, and Life Sciences.

Following the completion of the interviews, we combined the broader survey's descriptives and the insights that emerged from the participants. We analysed the interviews (N=30) by using the principles of thematic content analysis, examining the interviewees' answers organically and identifying potential common themes. Although we had certain expectations stemming from the literature and lived experiences, we engaged with the interview data in an inductive and organic manner. The ultimate reason for this methodological approach was to allow for the identification of patterns or themes outside of our expectations, but also to make space for the nuance and detail that the interviews provided. Still, clear and consistent patterns emerged, matching several of the survey questions that were answered, revealing a series of organisational gaps and behavioural norms, some of which were particular to each organisational unit and some which were common throughout the university. What emerged from this exercise of analysing a combination of qualitative and quantitative data are *four key reflections* relating to academic citizenship. We discuss these in turn in the following paragraphs.

The *first reflection* is that there seemed to be a widespread and shared belief that service work is important for the good functioning of the place where one works, and that it is a basic obligation of a good academic (see Figures 3 and 4), or, in the words of one of the colleagues we interviewed, 'Service work is the grease that makes university function.' This answer is quite representative of the overall importance of academic citizenship and service work in the university setting. It also reinforces one of the first musings of this essay: without academics engaging

in citizenship behaviours, the entire architectural make-up of academia would be severely compromised—however, whether that is desirable or not is in the eye of the beholder. A large part of this may be attributed to the overall importance of collegiality and community in university settings; being the 'nice colleague,' the 'helpful colleague,' the 'team-player.' This finding was not characterised either by a gender or rank pattern: everybody seemed to recognise the importance of service work. Though this reaffirms our expectations, it also raises further questions relating to how service work can become a 'tough topic' from a gender perspective when we start from a premise of general agreement on its importance.
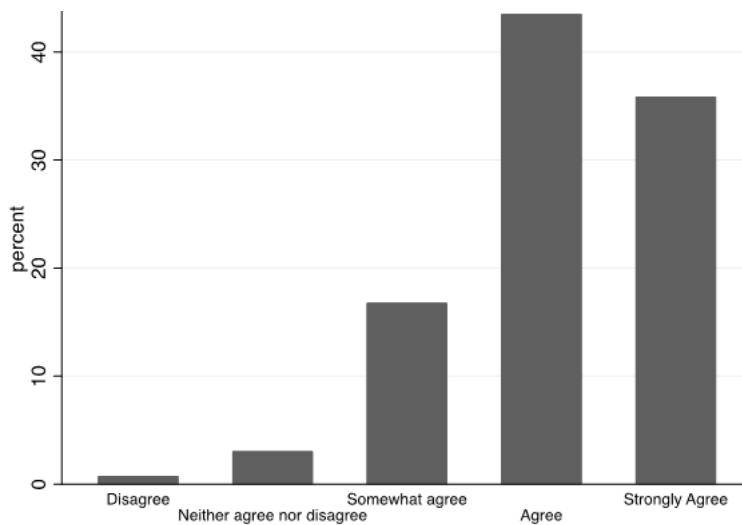
Figure 3. *Distribution of the survey answers to item 'Service work is important for the good functioning of our department/faculty'*
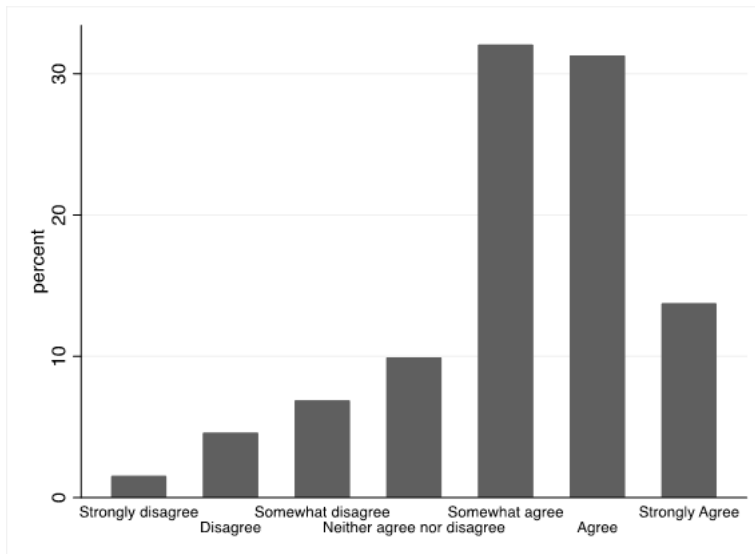
Figure 4. *Distribution of the survey answers to item 'Service work is a basic obligation for every good academic'*

The *second* reflection that clearly emerged in the interviews is that service work is not all the same. When asked about the potential consequences of engaging with service work, be it positive or negative, it became rather clear from the interviews that while certain tasks are recognised and appreciated, such as serving in the faculty council or in some given high-level committees, others are simply forgotten or taken for granted. Certain tasks are prestigious or very visible, and could even be very beneficial; for instance, being the editor of an academic journal. But many important tasks, such as covering for a colleague, grading an extra thesis, or proofreading a document, often get overlooked. As one participant noticed, 'Some tasks are more visible than others—committee work is more visible than document translation.' Still, those are tasks that are very important to the good functioning of our environments, as one of our participants pointed out, 'The bigger stuff is relatively acknowledged. The smaller stuff gets ignored very easily.' This finding consistently emerged across the qualitative interviews, along with the observation that this is problematic, mostly for those who do not have access to the most prestigious tasks (younger academics), or that these tasks do not cause any recognition for those who do them more often (established female academics, but also junior academics). This is consistent with the literature we presented above, which finds that women are often perceived negatively if they do not perform service work (e.g., Babcock et al., 2022).

Linked to this is the *third* reflection: the recognition of the service work. Interestingly enough, the survey showed a pattern. As Figures 5 and 6 demonstrate, participants seemed to be very aware of the importance of academic citizenship and service work in the university setting. However, while individually, participants

tended to be aware of their own and their colleagues' service tasks, there are mixed results when it comes to the awareness and recognition of such tasks at the department or unit level. This suggests that, as academic citizenship behaviours themselves, their recognition and potential reward also seems to depend—to a certain extent—on the good will and resources of the given department or unit management.
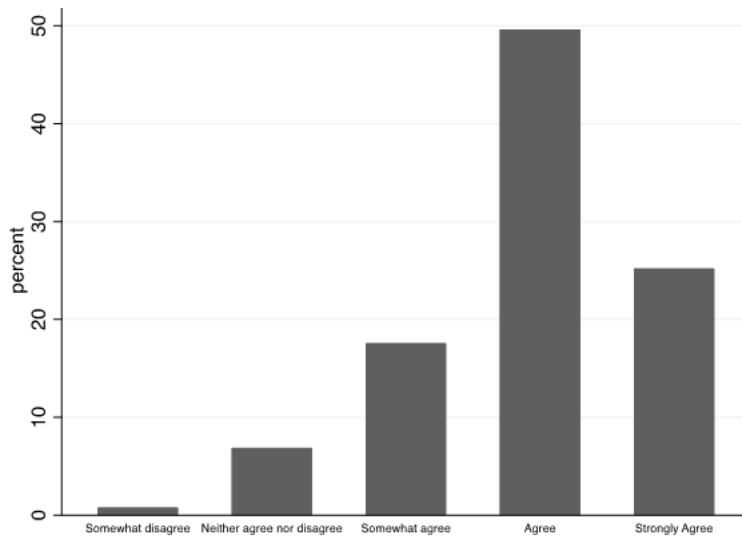

Figure 5. *Distribution of the survey answers to item 'I recognise the importance of the service work my colleagues engage in'*
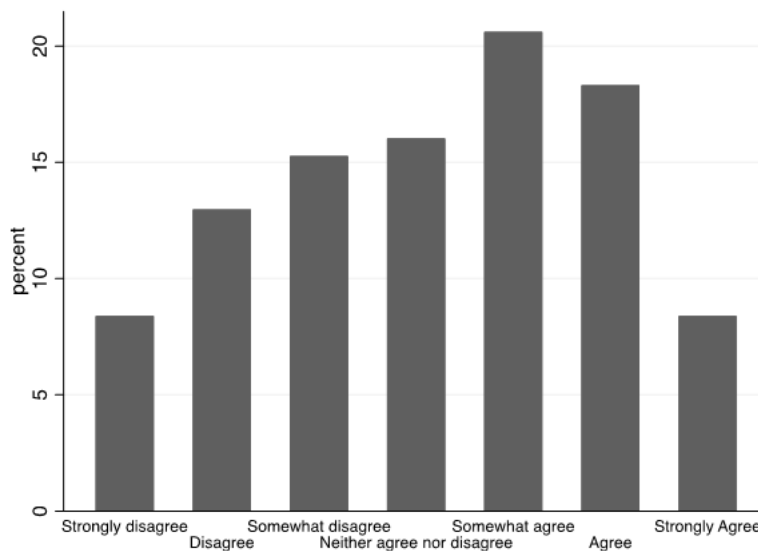
Figure 6. *Distribution of the survey answers to item 'My department is aware of the importance of service work for the functioning and success of the organisation'*

At this point, we also see the *fourth* reflection of this essay. When breaking down the figure above by gender, we can observe that women in our survey disagree more on the statement of Figure 6 regarding the awareness of the importance of service work within the participants' department or organisational unit. As Figure 7 shows, a gendered pattern also emerged with regard to the profile of those engaging in service work. Both the survey and the interviews clearly outlined elements pointing out at differences across genders, but also across level of seniority. As two of our colleagues pointed out, 'There is a significant gender and hierarchy gap in the engagement with service work,' and 'Younger staff and female staff are more likely to engage in service tasks.' Although when it came to the service-work self-assessment in the survey, we did not notice a difference across gender and seniority (see earlier discussion about the limits of using a survey for a topic such as this one), these elements could also be re-traced in a more indirect way when looking into other items. For example, as Figure 8 demonstrates, women felt more pressure to engage in service work if they wanted to be promoted.
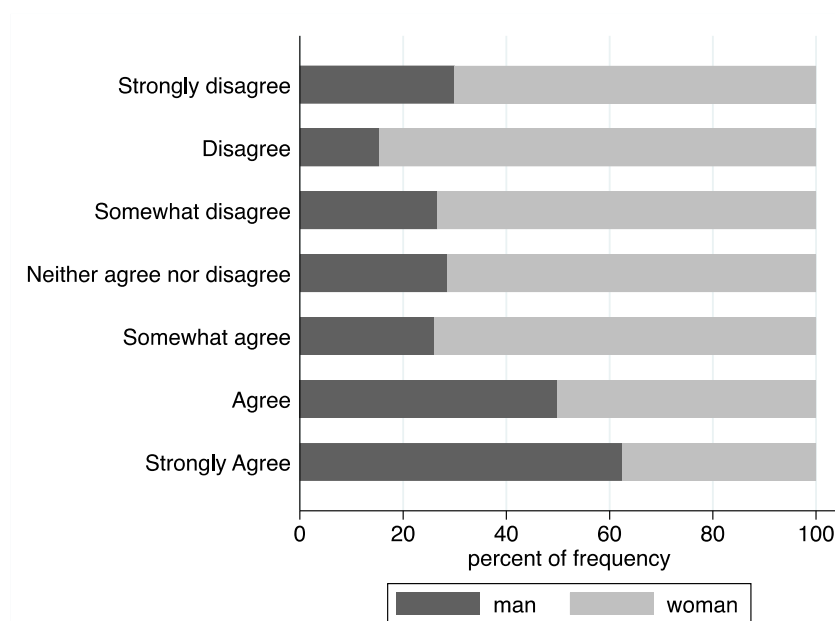

Figure 7. *Distribution of the survey answers to item 'My department is aware of the importance of service work for the functioning and success of the organisation' by gender*
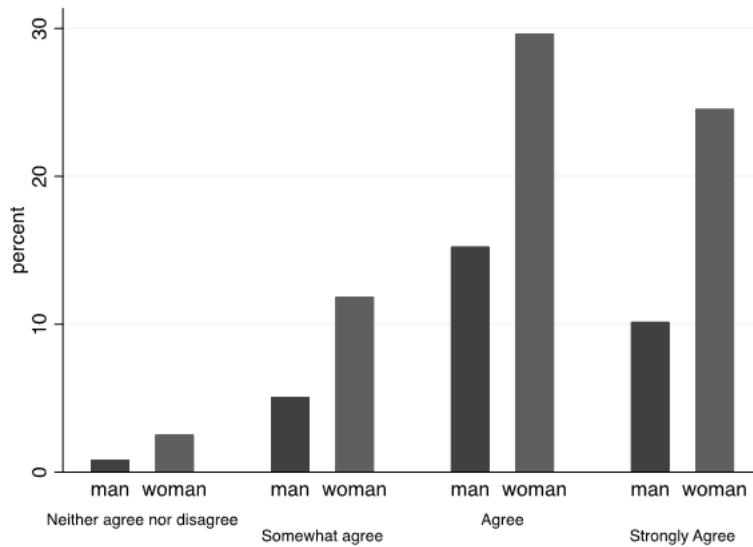
Figure 8. *Distribution of the survey answers to item 'Engaging in extra tasks that are not part of my formal contract as part of service work is important to get promoted'*

However, both through the interviews and in the survey, we could observe a widespread awareness that research remains the most important task if one wants to get promoted. And, as Figures 9 and 10 show, women are under this impression even more than men. The following quotes by two of our female colleagues are pretty telling: 'Service work bleeds into research time and compromises research output,' and 'I try not to work overtime, but I do service tasks, and they take some of my research time.' As Figure 10 shows, women also agree more than men that engaging in service work leaves less time for research.
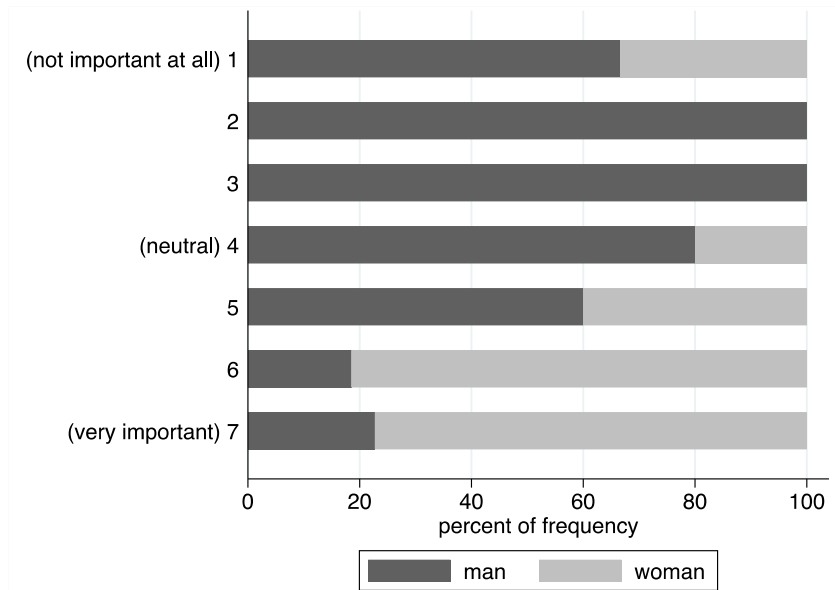
Figure 9. *Distribution of the survey answers to item 'At your unit or faculty, how important is your performance in research to get promoted?'*
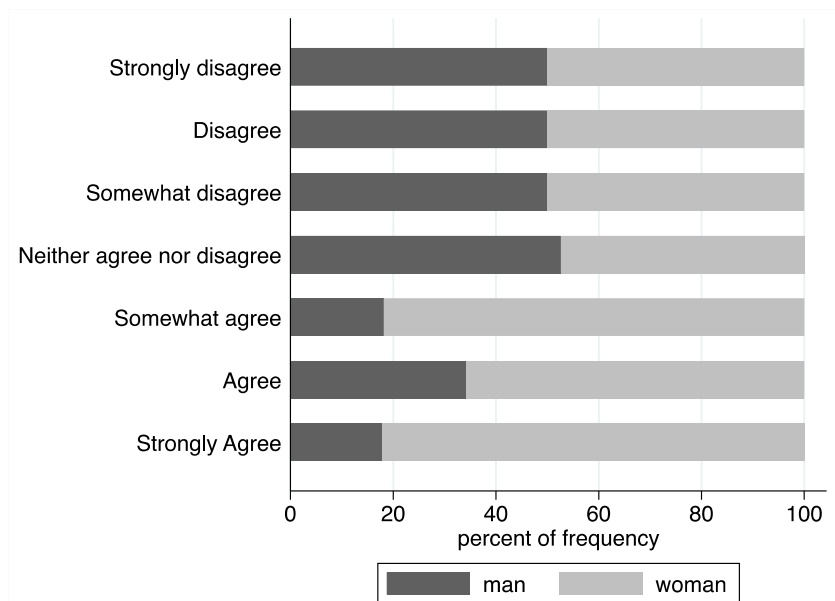

Figure 10. *Distribution of the survey answers to item 'Engaging in service work leaves less time for my research'*

Finally, alongside gender, hierarchy also seems to be an important factor in why, how, and to what extent academics engage in academic citizenship behaviours. As Figure 11 shows, when asked about feeling pressured to take on additional service tasks, the participants' responses present a very clear image of how academic rank influences *who* takes on service work.
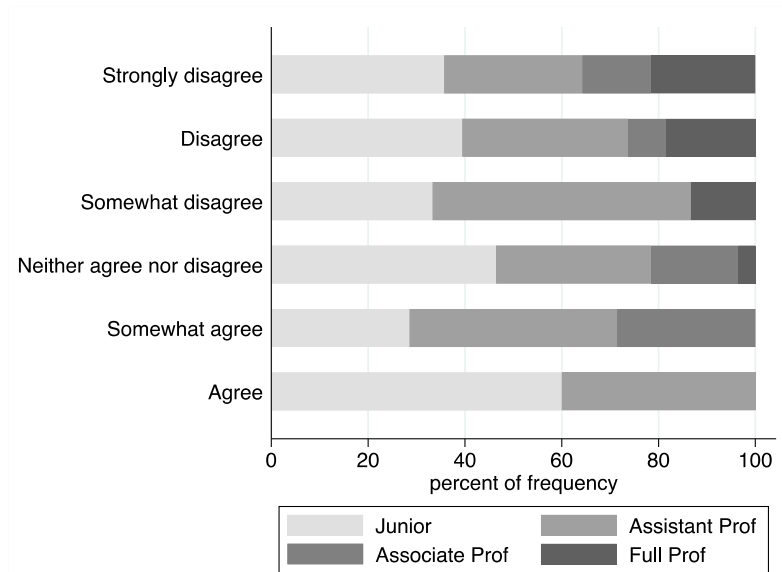
Figure 11. *Distribution of the survey answers to item 'I feel pressured by my colleagues to engage in service work'*

Conclusions

Gender disparities in academia are pervasive. While many policy actions have been taken over the last few years to address the academic gender gap in terms of pay, compensation, work distribution, et cetera, the gap remains wide open. Although more transparency has been achieved—for instance, through the publication of reports on the quantitative gender disparities in academia—policy action is necessary. While this issue has been highlighted in academic literature, higher education policy has not yet caught up. Academic citizenship and service work behaviours are largely left unrecognised and unrewarded through tangible incentives—with a few emerging notable exceptions, such as the *Recognition and Rewards* (Erkennen en waarderen) initiative in the Netherlands.

This reflection piece shows that the known gender disparities in academia seem to be relevant in the discussion about academic citizenship. Such behaviours, which are clearly gendered in character, have been shown to affect the career advancement and professional development of women in academia when left unrecognised and unrewarded. Still, while research has shown that women engage in service work at a higher rate than their male counterparts, it is less clear what the underlying socio-psychological drivers, contextual boundary conditions, and concrete situational influences of such gender-based disparities are. Through this essay, we propose that research into these factors needs to be flexible to account for the inherent informal nature of academic citizenship and service work, building on

qualitative and quantitative data together and taking a serious look into the potential intersections that can lead to situations of hardship and feelings of unfairness.

More research into these aspects of the intersections between gender disparities and service work behaviour is necessary to gain an overarching picture of the situation and design appropriate policy solutions. As a last note, a long-term shift in academic culture is necessary to identify and address hidden gender and other demographic biases, which often intersect—such as race, ethnicity, sexual orientation, or disability. Such a cultural change requires time and effort; it is, however, central to the creation of a kinder and more inclusive research culture that values and evaluates science beyond research metrics and publications.

Acknowledgements

Author biographies

Luana Russo is Assistant Professor in Political Behavior and Quantitative Methods at the Department of Politics of Maastricht University. Her research focuses on affective polarization and negative partisanship. Luana also serves as program director of the Bachelor in European Studies at the Faculty of Arts and Social Sciences, co-editor of the journal Politics of the Low Countries, and chair of the ECPR standing group of Affective Polarization.

Danai Petropoulou Ionescu is a PhD Candidate in EU Administrative Law and Governance at the Department of Public Law and the Department of Politics of Maastricht University. Her main line of research focuses on the quality of EU administrative practices. Next to her main research, Danai also works on issues of diversity and inclusion in academic settings. She is the Managing Editor of the Review of European Administrative Law.

References

Babcock, L., Peyser, B., Vesterlund, L., & Weingart, L. (2022). *The no club: Putting a stop to women's dead-end work.* Simon and Schuster.

Beauregard, A. T. (2012). Perfectionism, self-efficacy and OCB: The moderating role of gender. *Personnel Review*, *41*(5), 590-608. https://doi.org/10.1108/00483481211249120

Bisello, M., & Mascherini, M. (2017). The gender employment gap: Costs and policy responses. *Intereconomics*, 52, 24-27. https://doi.org/10.1007/s10272-017-0638-y

Bozzon, R., Murgia, A., & Poggio, B. (2019). Gender and precarious careers in academia and research: Macro, meso and micro perspectives. In A. Murgia A. & B. Poggio (Eds.), *Gender and precarious research careers: A comparative analysis* (Ser. Routledge research in gender and society, 74) (pp. 50-80). Routledge.

Casad, B. J., Franks, J. E., Garasky, C. E., Kittleman, M. M., Roesler, A. C., Hall, D. Y., & Petzel, Z. W. (2020). Gender inequality in academia: Problems and solutions for women faculty in stem. *Journal of Neuroscience Research*, *99*(1), 13–23. https://doi.org/10.1002/jnr.24631

Deal, T. E., & Kennedy, A. A. (1982). *Corporate cultures: The rites and rituals of corporate life*. Addison-Wesley.

Diefendorff, J. M., Brown, D. J., Kamin, A. M., & Lord, R. G. (2002). Examining the roles of job involvement and work centrality in predicting organizational citizenship behaviors and job performance. *Journal of Organizational Behavior, 23*(1), 93-108.

Docka-Filipek, D., Draper, C., Snow, J., & Stone, L. B. (2023). 'Professor moms' & 'hidden service' in pandemic times: Students report women faculty more supportive & accommodating amid U.S. covid crisis onset. *Innovative Higher Education, 48*(3), https://doi.org/10.1007/s10755-023-09652-x

Eagly, A. H., & Crowley, M. (1986). Gender and helping behavior: A meta-analytic review of the social psychological literature. *Psychological Bulletin, 100*(3), 283–308, https://doi.org/10.1037/0033-2909.100.3.283

European Commission. (2021). *She figures 2021 – Gender in research and innovation – Statistics and indicators*, Publications Office, https://data.europa.eu/doi/10.2777/06090

European Commission. (2023). *The COVID-19 impact on gender equality in research and innovation: Policy report*. European Commission. https://research-and-innovation.ec.europa.eu/knowledge-publications-tools-and-data/publications/all-publications/covid-19-impact-gender-equality-research-and-innovation_en

Flaherty, C. (2018). 'Dancing backwards in high heels': Study finds female professors experience more work demands and special favor requests, particularly from academically "entitled" students. *Inside Higher Ed*. https://www.insidehighered.com/news/2018/01/10/study-finds-female-professors-experience-more-work-demands-and-special-favor

Flaherty, C. (2020a, August 11). 'Babar in the room': Faculty parents are once again being asked to perform a miracle: Get their students and their own kids through the semester in one piece. Does it have to be this way? *Inside Higher Ed.* https://www.insidehighered.com/news/2020/08/11/faculty-parents-are-once-again-being-asked-perform-miracle

Flaherty, C. (2020b, October 20). Women are falling behind: Large-scale study backs up other research showing relative declines in women's research productivity during COVID-19. *Inside Higher Ed.* https://www.insidehighered.com/news/2020/10/20/large-scale-study-backs-other-research-showing-relative-declines-womens-research

de Goede, M., van Veelen, R., & Derks, B. (2016). Financiële beloning van mannen en vrouwen in de wetenschap [Financial rewards of men and women in science]. https://www.lnvh.nl/a-1270/lnvh-rapport-financiele-beloning-mv-in-de-wetenschap

Guarino, C. M., & Borden, V. M. H. (2017). Faculty service loads and gender: Are women taking care of the academic family? *Research in Higher Education, 58*(6), 672-694. https://doi.org/10.1007/s11162-017-9454-2

Harris, A., & González, C. (2012). Introduction. In G. Gutiérrez y Muhs, Y.F. Niemann, C.G. Gonzalez, A.P. & Harris, A. P. (Eds.). *Presumed incompetent: The intersections of race and class for women in academia* (pp. 1-14). University Press of Colorado.

Harris, M. B. (1992). When courtesy fails: Gender roles and polite behaviors. *Journal of Applied Social Psychology, 22*(18), 1399-1416. https://psycnet.apa.org/doi/10.1111/j.1559-1816.1992.tb00956.x

Heilman, M. E., & Chen, J. J. (2005). Same behavior, different consequences: Reactions to men's and women's altruistic citizenship behavior. *Journal of Applied Psychology, 90*(3), 431-441. https://psycnet.apa.org/doi/10.1037/0021-9010.90.3.431

Keane, L., & Griffin, C. P. (2016). Testing the limits of self-assessment: A critical examination of the developmental trajectories of self-assessment processes. *Irish Teachers' Journal, 3*(2), 1-23.

Landelijk Netwerk Vrouwelijke Hoogleraren (LNVH). (2022). Monitor vrouwelijke hoogleraren 2022 [Monitor of female professors 2022]. https://www.lnvh.nl/monitor2022/downloads/lnvh-monitor-vrouwelijke-hoogleraren-2022.pdf

Le Feuvre, B., Bataille, P., Kradlofer, S., del Rio Carral, M., & Sautier, M. (2019). The gendered diversification of academic career paths in comparative perspective. In A. Murgia, A & B. Poggio (Eds.), *Gender and precarious research careers: A comparative analysis* (Ser. Routledge research in gender and society, 74) (pp. 15-49). Routledge.

Macfarlane, B. (2016). Collegiality and performativity in a competitive academic culture. *Higher Education Review*, *48*(2), 31-50.

Resmini, M. (2016). The 'leaky pipeline'. *Chemistry: A European Journal, 22*(11), 3533- 3534.

Sjöström, O., & Holst, D. (2002). Validity of a questionnaire survey: Response patterns in different subgroups and the effect of social desirability. *Acta Odontologica Scandinavica, 60*(3), 136-140.

Squazzoni, F., Bravo, G., Grimaldo, F., Garcia-Costa, D., Farjam, M., & Mehmani, B. (2020). Only second-class tickets for women in the covid-19 race. A study on manuscript submissions and reviews in 2329 Elsevier journals. *SSRN*. https://dx.doi.org/10.2139/ssrn.3712813

Staniscuaski, F., Kmetzsch, L., Soletti, R. C., Reichert, F., Zandonà, E., Ludwig, Z. M. C., Lima, E. F., Neumann, A., Schwartz, I. V. D., Mello-Carpes, P. B., Tamajusuku, A. S. K., Werneck, F. P., Ricachenevsky, F. K., Infanger, C., Seixas, A., Staats, C. C., & de Oliveira, L. (2021). Gender, race and parenthood impact academic productivity during the COVID-19 pandemic: From survey to action. *Frontiers in Psychology, 12*, https://doi.org/10.3389/fpsyg.2021.663252

van Veelen, R., & Derks, B. (2019). Verborgen verschillen in werktaken, hulpbronnen en onderhandelingen over arbeidsvoorwaarden tussen vrouwelijke en mannelijke wetenschappers in Nederland [Hidden difference in tasks, resources, and negotiations about work benefits between female and male scientists in the Netherlands]. https://www.lnvh.nl/a-3042/verborgen-verschillen-in-werktaken-hulpbronnen-en-onderhandelingen-over-arbeidsvoorwaarden-tussen-vrouwelijke-en-mannelijke-wetenschappers-in-nederland#:~:text=Vrouwen%20besteden%20minder%20tijd%20aan,spenderen%20aan%20onderzoek%20dan%20mannen

Viglione, G. (2020, May 20). Are women publishing less during the pandemic? Here's what the data say: Early analyses suggest that female academics are posting fewer preprints and starting fewer research projects than their male peers. *Nature*. https://www.nature.com/articles/d41586-020-01294-9