

Gender differences in journal publishing in the social sciences and humanities

Raf Guns¹, Emanuel Kulczycki², Alesia A. Zuccala³, Kasper Bruun⁴, Tim C.E. Engels¹, Olli Eskola⁵, Andreja Istenič Starčič⁶, Michal Petr⁷, Janne Pölönen⁸, Ewa A. Rozkosz², Gunnar Sivertsen⁹

1 raf.guns@uantwerpen.be, tim.engels@uantwerpen.be

Centre for R&D Monitoring, Faculty of Social Sciences, University of Antwerp, Middelheimlaan 1, Antwerp, 2020 (Belgium)

2 emek@amu.edu.pl, ewa.rozkosz@amu.edu.pl

Scholarly Communication Research Group, Adam Mickiewicz University in Poznań, Szamarzewskiego 69, Poznań, 60-568 (Poland)

3 a.zuccala@hum.ku.dk

Department of Information Studies, University of Copenhagen, Copenhagen, Njalsgade 76, 2300, Copenhagen (Denmark)

4 kasb@ufm.dk

Ministry of Higher Education and Science, Agency for Science and Higher Education, Bredgade 40, Copenhagen, 1260 (Denmark)

5 olli.eskola@csc.fi

CSC – IT Center for Science, Keilaranta 14, Espoo (Finland)

6 andreja.starcic@gmail.com

University of Ljubljana, Ljubljana, 1000 (Slovenia) & University of Primorska, Koper, 6000 (Slovenia)

7 petr@rect.muni.cz

Masaryk University, Research Office, Zerotinovo namesti 9, Brno, 601 77 (Czech Republic)

8 janne.polonen@tsv.fi

Federation of Finnish Learned Societies, Snellmaninkatu 13, Helsinki, 00170 (Finland)

9 gunnar.sivertsen@nifu.no

Nordic Institute for Studies in Innovation, Research and Education, P.O. Box 2815, Oslo, 0608 Toyen (Norway)

Introduction

Most research on the role of gender in relation to authors' publishing behaviour has focussed on gender differences in productivity (Abramo, D'Angelo, & Caprasecca, 2009; Arensbergen, Weijden, & Besselaar, 2012; Mayer & Rathmann, 2018) and impact (Larivière, Ni, Gingras, Cronin, & Sugimoto, 2013). Overall, studies find that research output in most countries and fields is dominated by men. Moreover, female-led research tends to appear in less prominent publication channels (Nielsen, 2017; Teele & Thelen, 2017) and to be cited less (Larivière et al., 2013). These gender differences may be due in part to the fact that women engage less in collaborations (Nielsen, 2017; Teele & Thelen, 2017). In addition, factors like age and academic position play a role (Larivière et al., 2013; Puuska, 2010; Rørstad & Aksnes, 2015).

While some of these studies have relied on international databases like Web of Science, others use more comprehensive data sources like national bibliographic databases (Nielsen, 2017; Sīle et al., 2018). This distinction is especially relevant for the social sciences and humanities (SSH), where non-English and locally oriented journals and book publications often play an important role. Since international databases mostly focus on covering international journals, one needs

to use national databases to provide a complete picture of scholarly communication in the SSH (Kulczycki et al., 2018). The disadvantage of local sources is that they have limited geographical coverage.

In this paper, we study the relationship between gender and publication productivity using a unique dataset that combines data from national bibliographic databases of seven European countries. Following Arensbergen et al. (2012), the term ‘productivity’ is used to refer to the amount of research output produced. We consider the following questions:

1. What is the number and share of male and female researchers per country and discipline?
2. How productive are male and female researchers per country and discipline using whole counting (i.e., each contributing author is assigned a score of 1) and fractional counting (i.e., each contributing author to a publication with n authors is assigned a score of $1/n$)?
3. What is the number and share of publications in English, the local language, and other languages for female and male researchers per country and discipline?

Data

The dataset encompasses information on all 164,218 peer-reviewed journal articles published in these countries during the period 2013–2015, as well as the authors of these publications and their gender and discipline. This dataset was compiled from national databases that comprehensively cover the peer-reviewed journal literature in the respective countries.

Preliminary results

In this section, we present a few preliminary results. First, we look into the number of active researchers per country and discipline. At the aggregate field level (humanities and social sciences), the number of male researchers exceeds the number of female ones in every country, with the exception of Finland (54.4% women in humanities and 55.7% in social sciences) and Poland (50.4% in social sciences). The lowest share of female researchers occurs in the social sciences in Denmark (39.9%).

There are, however, large differences between disciplines. While most disciplines are dominated by men, others have a majority of female researchers (Figure 1).

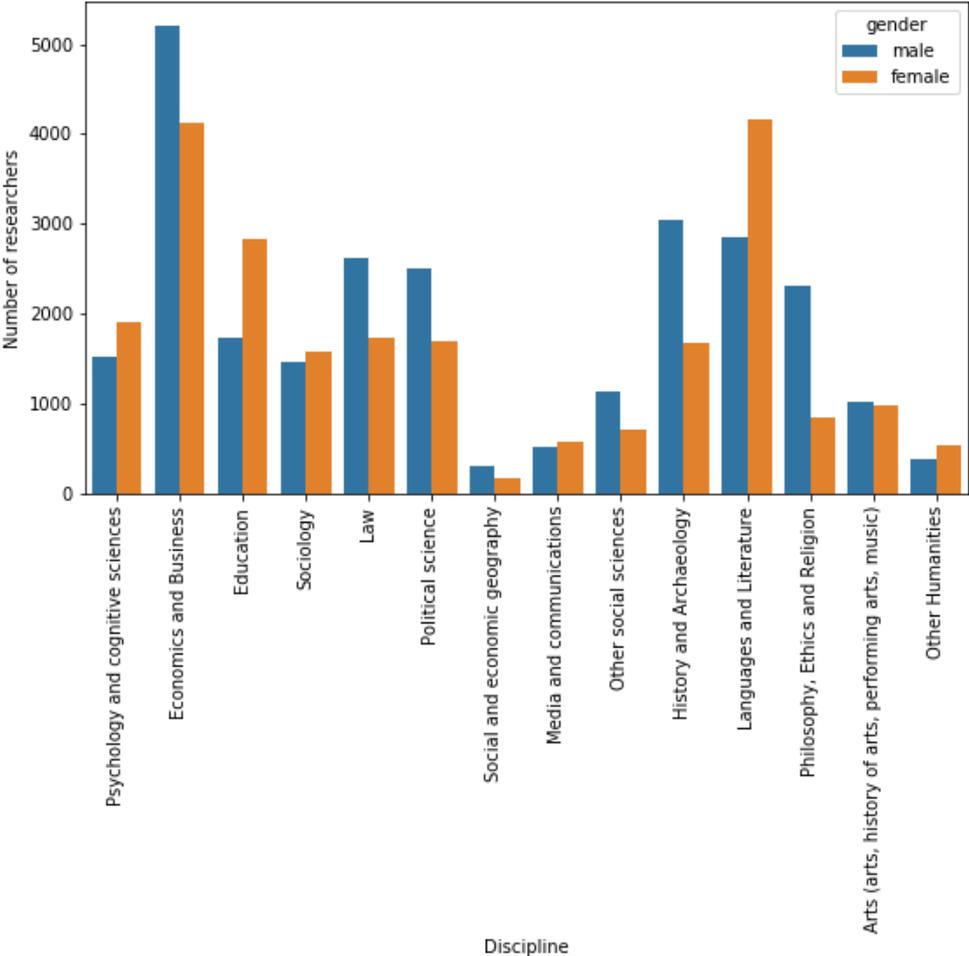


Figure 1. Number of male and female researchers per SSH discipline in the dataset (all countries)

In terms of productivity, we find that in each country female authors tend to publish fewer articles than male ones. The average difference between men and women is small, however, and in general differences between countries are larger than gender differences within one country. Figure 2 shows the distribution by country using a letter-value plot (Hofmann, Wickham, & Kafadar, 2017). There are no substantial qualitative differences between the results for whole and fractional counting, indicating that, overall, women in our dataset collaborate at a similar rate to men.

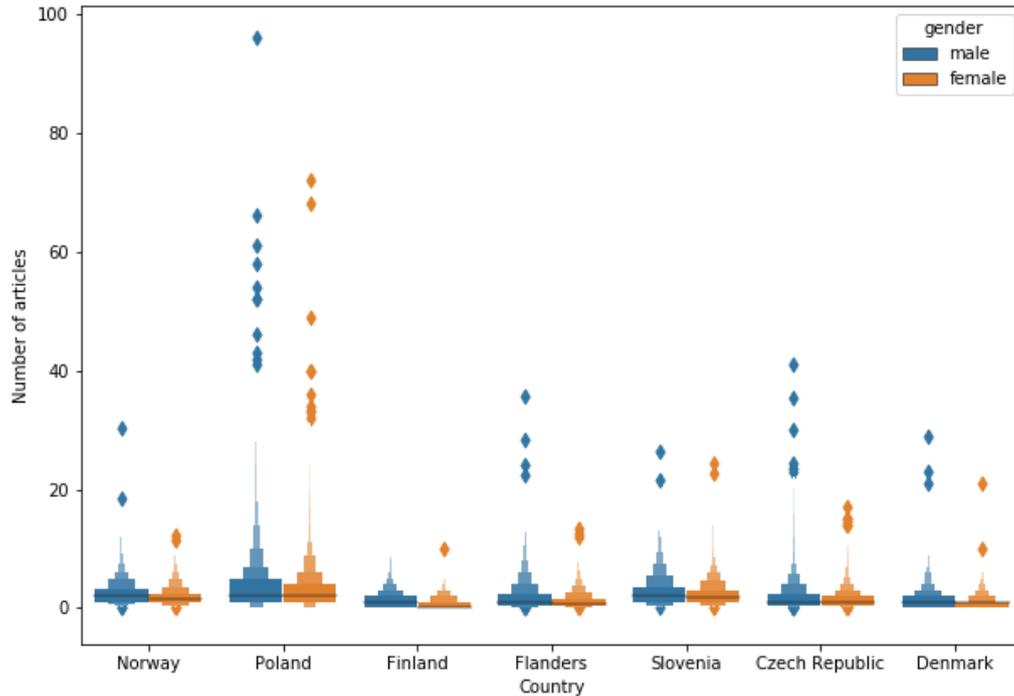


Figure 2. Distribution of number of articles by male and female researchers (fractional counting)

Finally, we consider language differences between male and female researchers. Our results indicate that in five countries, the average female author is more likely to publish in the local language than their male counterpart. The differences are, however, small (Figure 3).

At the conference presentation, the answers to the research questions will be further elaborated and their interpretation and implications will be discussed.

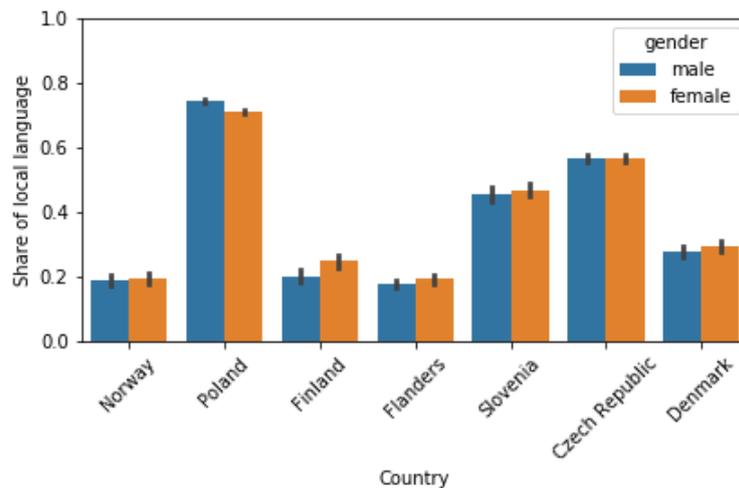


Figure 3. Average share of articles in local language

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