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Gender and career patterns among social scientists in the written press

An analysis of media coverage of social scientists in Flanders

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VUB ONDERZOEK RESEARCH

Scientists in the written press

This note is part of ECOOM-VUB's broader research project, which examines various facets of societal impact of university research. The goal of that research project is to analyse both the registration and evaluation of societal impact. This note highlights one facet of that broader project by focusing on scientists interacting with the media and sharing their scientific insights with the public.

Disseminating scientific knowledge through various media to a wide audience is increasingly encouraged today. The ambitions of open science clearly put communication at the forefront for all researchers. Those who are able to communicate specialised knowledge via the media to non-academic audiences promote the *public understanding of science*, and narrow the gap between science and the public. With the increasing importance of open science communication, it is relevant to explore how that communication can best be measured. Given that social media interactions have a limited reach and make indicators susceptible to manipulation, this research focuses on mentions of scientists in traditional media with a wide target audience, such as newspapers and magazines. Social scientists from Flemish universities were chosen for further analysis here, as they feature prominently in traditional media, but their presence has rarely been critically examined.

Purpose of this research note

This research note focuses on the following aspects of open science communication:

- The extent to which researchers are represented in the Flemish written press, focusing specifically on:
    - The extent to which media attention differs between women and men
    - The extent to which media attention differs according to career position
    - What possible explanations can be offered for this
- What the possible implications of this are in the light of the open science agenda and for using media attention as an indicator of open science communication

Data collection and analysis

To compile a list of active social scientists in Flanders, the Flemish Research Information Space (FRIS) database (Flemish Government, 2022) was used for further analysis, We then enriched the data with information on gender (reduced to sex), career position and discipline (see Table 1). The names (n = 6948) were then entered into the GoPress database (Belga, 2022) in order to map their presence in Flemish newspapers and magazines. For this purpose, the year 2019 was selected, given that 2020 and 2021 were atypical periods due to the covid-19 pandemic. Moreover, as 2019 was an election year, the media's demand for social science expertise was especially high, and thus provides sufficient data an exploratory pilot study. Researchers with well-known names outside academia were not included, as they appeared in the media without university affiliations. Researchers who have a mandate in politics or are acting as university rectors were likewise excluded.

Table 1. Gender distribution per discipline in the social sciences of staff active in Flemish universities in 2019. Source: FRIS.

Discipline (institutional)	Male		Female		Total	
	n	%	n	%	n	%
(multidisciplinary or other)	45	0,6	83	1,2	128	1,8
Economics and business	1157	16,7	738	10,6	1895	27,3
Law and legal studies	1048	15,1	863	12,4	1911	27,5
Media and communications	179	2,6	223	3,2	402	5,8
Pedagogical and educational sciences	222	3,2	401	5,8	623	9,0
Political sciences	264	3,8	189	2,7	453	6,5
Psychology and cognitive sciences	373	5,4	529	7,6	902	13,0
Social and economic geography	83	1,2	69	1,0	152	2,2
Sociology and anthropology	232	3,3	250	3,6	482	6,9
Total	3603	51,9	3345	48,1	6948	100,0

Results

A first important observation is that only a minority of Flemish social scientists appeared in the written press in 2019. Only 11,2% of social scientists (n = 6948) appeared at least once in the written press in 2019; the vast majority (88,8%) did not appear in it. Moreover, within this 11,2% minority, it is striking that more than twice as many (68,0%) male social scientists as female ones (32,0%) were mentioned in the Flemish written press (see Table 2). Differences in gender among predocs and postdocs were minimal in 2019, but, at the professorial level, according to Table 2, men were almost three times more likely (43,0%) to appear in the written press than their female colleagues (15,2%).

Table 2. Number of mentions in 2019 of social scientists in the Flemish written press by career position.

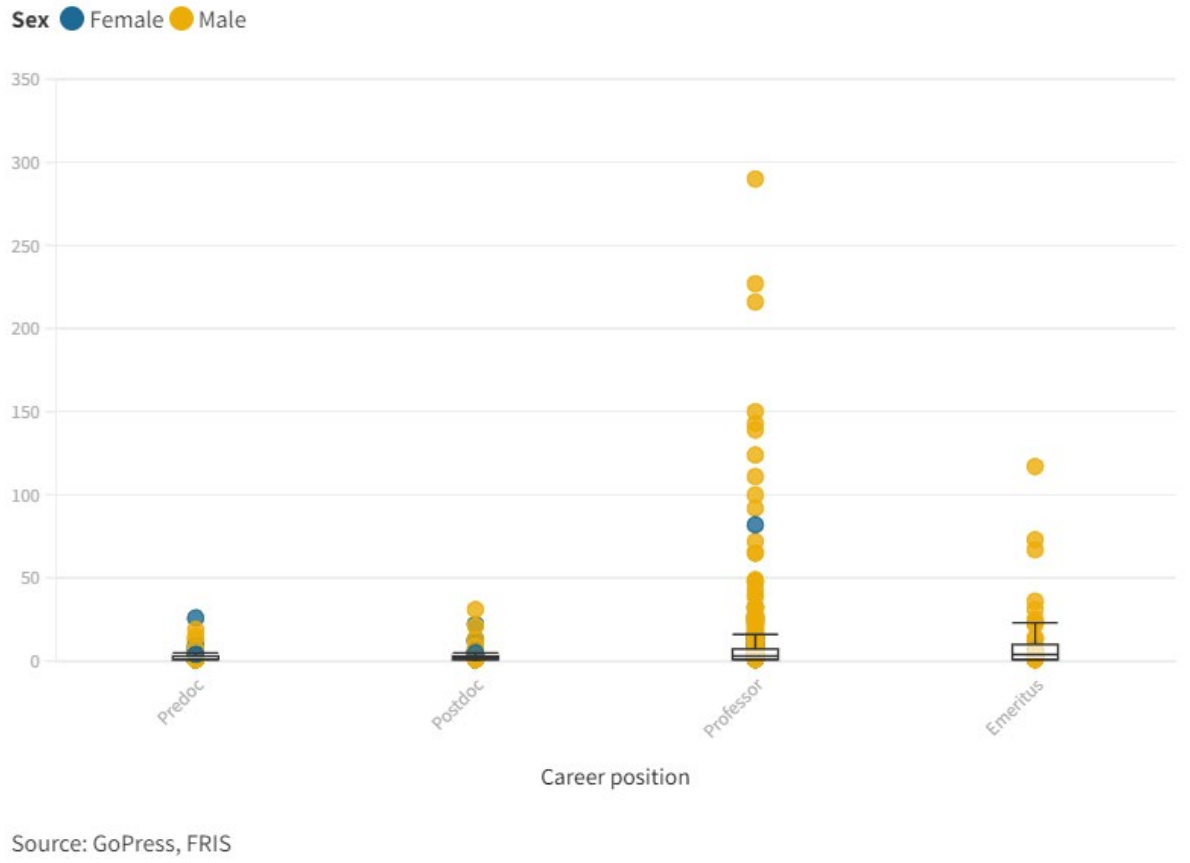
Career position	Male		Female		Total	
	n	%	n	%	n	%
Predoc	83	10,7	68	8,8	151	19,5
Postdoc	72	9,3	60	7,7	132	17,0
Professor	334	43,0	118	15,2	452	58,2
Emeritus	39	5,0	2	0,3	41	5,3
Total	528	68,0	248	32,0	776	100,0

Given that women were generally two times less prevalent as their male counterparts, and female professors even three times less, the question arises as to whether there are institutional barriers preventing female academics from competing with male researchers in a similar magnitude in terms of media coverage. There may be a link between the underrepresentation of women in senior academic positions and their underrepresentation as experts in the media. Indeed, the domain expertise of academics depends on the length of their career. As experts climb the career ladder, both their responsibilities and legitimacy grow. After all, a PhD student speaks solely on basis of their own research, while a professor, in addition to their capacity as a domain expert, may also speak as the head of a research group, department or faculty.

A second possible explanation points at public intellectuals, an exceptional type of scientist who appears with extraordinary frequency in the media. It is immediately noticeable from Chart 1 that, with one exception, the outliers (more than 50 mentions per year) are exclusively men. Two professors in the field of political science and another one in the field of economics featured the most in the 2019 written media. With 290, 227 and 216

mentions, respectively, in the election year 2019, they provided the written press with interpretations, explanations, interviews and more.

Chart 1. Number of media mentions (>1) in 2019 of social scientists in the Flemish written press (n = 776) by career position. One data point is one social scientist. Chart created with Flourish.



Source: GoPress, FRIS

First of all, a Matheus effect may possibly occur here: unknown social scientists remain unknown to the general public, while intellectuals who are already well-known become even more so. Personal characteristics, such as eloquence and charisma, as well as accessibility to journalists, probably play an important role here. These professors already enjoy academic prestige, and their established position may allow them to make time for science outreach activities that are not strictly required of them. Moreover, their virtually unrestricted accessibility would fit seamlessly with the way, and especially the speed, that linear media are supposed to work. News articles have to be produced at a rapid pace every day, and a researcher who is known as an expert to a large audience and available to briefly comment on current events is certainly desirable.

Summary and discussion

The results of this study show a biased pattern for mentions of social scientists in the Flemish written press in 2019. A self-reinforcing dynamic might make it difficult for young and female researchers to feature as prominently in the media, as they would have to "compete" with known and established public intellectuals. The open science agenda requires all scientists to share their findings with a non-academic audience, but this ambition disregards the structural existence of a selective group of established experts who command a substantial share of media attention. A measurement tool for open science communication that only takes the number of media mentions into account, as might be proposed within the context of monitoring societal impact, risks to disproportionately disadvantage young researchers, and therefore also requires the inclusion of indicators with qualitative properties. Existing policies could also address this by lowering thresholds

and increasing the visibility of young researchers. The Flemish Expert Database (Flemish Government, 2022) aims to precisely do that: increase the visibility "of experts from groups that are less addressed; people who identify as women, have a migration background and persons with disabilities" (n.p.) (translated to English). Finally, universities can also create internal awareness campaigns around this topic.

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