Why do female academics publish less than their male peers?

By Ingrid Piller | March 7, 2018 | Literacies

Tomorrow is International Women’s Day and we will therefore look at the gender productivity gap in academia.

Last year I was fortunate to receive an Australian Research Council Discovery grant to investigate everyday intercultural communication. That means I was one of 1,894 female chief investigators funded under Australia’s national research flagship program. At the same time, 5,011 male chief investigators received funding under the scheme. In other words, the gender ratio is 27:73.

Does that mean that the selection process is discriminating against women? No, definitely not, because the success rate of female applicants was with 20.3% higher than the male success rate of 18.4%.

The figures show that female researchers are significantly less likely to apply for research funding in the first place. Writing grant applications and obtaining research funding is essential for academic career success. The fact that women are less likely to apply for and obtain grants is mirrored in the academic gender gap. Women predominate at the lowest rungs of the academic career ladder and at Lecturer B level (the usual post-doctoral entry level for continuing academic positions) we are close to parity. However, the picture changes dramatically at associate and full professor levels, where only 32% were female in 2016. (For global figures on women in academia, see here)
Some of the reasons for women’s stunted careers have long been obvious and we hardly need to mention that combining motherhood and a demanding career is tough. But the obvious does not explain the gender productivity gap: female doctors see fewer patients than male doctors, female real estate agents list fewer properties than male real estate agents and, as we saw above, female academics submit fewer grant applications.

This is not the end of the conundrum: patients of female doctors are less likely to die, properties listed by female agents sell at higher prices, and, as we saw above, female researchers are more likely to write successful grant applications. In sum, in a range of fields, equally placed women perform lower than men on quantitative measures but perform higher than men on qualitative measures.

Academic publishing provides another case in point: female researchers publish less than their male peers but what they publish is much more readable and better written, as economics researcher Erin Hengel has found.

Examining peer-reviewed articles published in the top-ranking economics journals, the researcher concludes that female-authored papers are better written than male-authored papers, and that the gap is particularly stark when it comes to senior academics. Female economists write increasingly clearly over the course of their career while the writing of their male peers does not perceptibly improve.

The readability of an English text is the result of syntactic and word choices such as the ratio of long sentences, passive voice, multi-syllabic and rare words. Measurement of readability can be automated and MS Word now has two common automated tests of readability, the Flesh-Kincaid Readability Tests, built in. Applying these and some other readability measures to more than 9,000 published articles – both before and after peer review – Hengel demonstrates far better writing quality by female academics.

However, writing well has a price: it takes more time.

Hengel shows that female academics learn to pay this price because their papers are subject to much greater scrutiny. Editors and peer reviewers impose tougher standards on women. This is evident from the fact that female-authored economics papers take around six months more to go through the review process than male-authored papers.

As a result, female academics come to experience peer review as a much tougher process and those who progress on the career ladder adjust their expectations about what is required. That means they invest more and more effort prior to submission and the quality of their submissions rises. Their male colleagues have no such feedback loop and remain blissfully ignorant of the fact their writing may be difficult to read.

The overall effect of this quantity-quality trade-off is to disguise discrimination as “personal choice.” The discrimination, bias and tougher standards that explain the gender productivity gap remain hidden, unacknowledged and unaddressed.

Hengel’s research neatly explains the gender productivity paradox in academia. Additionally, it does much more: it provides a way to think about how those who experience repeated discrimination and biased feedback adapt to those experiences. Hengel controls for native speaker status and does not address
intersectional disadvantage but native speaker status and ethnicity certainly stack the odds further. A st with the counter-intuitive finding that non-native speakers write more clearly than native speakers certainy points in that direction.

This International Women’s Day, academic women still have to be better to achieve the same measure of success as their male colleagues. Another helpful way to think about the #pressforprogress challenge is to turn the tables and make privilege visible (as a recent Guardian op-ed did beautifully with a thought experiment imagining the career of Boris Johnson if he were a black woman).

Reference


Related IWD content

- 2013, Migrant women’s empowerment in the city
- 2012, Strange Academic women