

# Do male and female authors employ different journal choice strategies?

Hayk Amirkhanyan<sup>1</sup> • Michał Krawczyk<sup>1</sup> • Maciej Wilamowski<sup>1</sup>

Received: 7 June 2022 / Accepted: 1 September 2023 / Published online: 10 October 2023 © The Author(s) 2023

# Abstract

Compared to their male colleagues, female scientists are less likely to secure senior positions and more likely to drop out of academia. The mechanisms behind these patterns have been the subject of debate in recent years, entailing serious policy implications. In this project we investigate one such mechanism, namely the journal submission strategies of male and female authors. In view of the evidence pertaining to higher self-confidence and/or risk acceptance among males, it may be expected that males would generally tend to follow a more ambitious journal choice strategy. To verify this conjecture, we developed a novel method and looked to acquire a new dataset, surveying scholars in three relatively genderbalanced disciplines representing humanities (history), social sciences (economics), and natural sciences (environmental sciences). Focusing on their specific, recently published papers, we ask about the journals to which they had submitted these papers and the journals to which they could potentially look to engage with. In the 1111 complete responses we found evidence that males are not only more self-confident but also more forward-looking in their journal choice.

Keywords Submission strategies · Gender differences · Overconfidence

Mathematics Subject Classification 91–02 · 91–08 · 91–11 · 91C99

JEL Classification  $C83 \cdot D01 \cdot J16$ 

# Introduction

Choosing the right journal is one of the key decisions made during a research project. Judging from surveys reported by Fry et al. (2009), around 90% of UK researchers, regardless of the discipline, consider peer reviewed journals as a "very important" channel for communicating research output. Publishing in prestigious journals is crucial for career development and, typically, for individual satisfaction. Journal choice is also important for the community and society at large, because articles published in reputable journals are more

Michał Krawczyk mkrawczyk@wne.uw.edu.pl

<sup>&</sup>lt;sup>1</sup> Faculty of Economic Sciences, University of Warsaw, Warsaw, Poland

widely read and cited, as well as taken more seriously. Clearly, it is thus very desirable that high-quality articles appear in top journals. Whereas one would expect just that, given how selective they are, there is some evidence to the contrary. In particular, retractions seem to be more common in top journals (Fang & Casadevall, 2011).

Low-quality or outright fraudulent papers being accepted in prestigious outlets is just one of many reasons, for which the current practice of academic publishing has been criticized (e.g. Bornmann, 2012); and indeed there has been an overhaul of practices in recent years. Notably, open-access journals have emerged as important players in the last decade or so, with more and more public agencies and universities wanting research results they have helped generate to be freely available rather than hidden behind a paywall (Björk, 2017). It is also a widespread perception that academics are under mounting pressure to publish and to publish well (van Dalen, 2021), even if this requires some ethical or intellectual maneuvering (Kiai, 2019). As a medical researcher quoted by Fry et al. (2009) put it, "Increasingly there has seemed to be no point in doing anything other than aiming for top class American publications." Likewise, Heckman and Moktan (2020) note that "Pursuit of T5 publications (T5 standing for the top five journals) has become the obsession of the next generation of economists." All the more, it is important to understand how researchers navigate this dynamic landscape.

One question particularly worth asking is that about the possible differences in the publishing strategies of males and females. There is some evidence that males tend to be more competitive, self-confident and risk-seeking (Barber & Odean, 2001; Croson & Gneezy, 2009). One likely (and advantageous) consequence of these characteristics in the world of academia is that they are more inclined to cite their own work (Ghiasi et al., 2016). It is also very plausible that males are more willing to target top journals. This approach on the part of males may perhaps partly explain gender difference in publication records (Holman et al., 2018; Jappelli et al., 2017; Madison & Fahlman, 2021; Mauleón et al., 2013; Mayer & Rathmann, 2018) and career paths (Weisshaar, 2017), including drop-out rates (Astorne-Figari & Speer, 2018).

# Literature review

For this overview we focused on studies exploring how an author's characteristics might affect their choice of journal. Here we touch upon theoretical and empirical papers in order to identify predictions that could potentially be tested given our approach.

#### How authors choose journals

Pepermans and Rousseau (2016) have reviewed the literature on this subject, and present three general categories that potentially determine an author's choice of journal:

- 1. Author's characteristics: "CV value of the publication, the author's evaluation of the editor, and past submission success";
- Journal's characteristics: "the quality of the review process, publication delays, submission rejection risk, service level of the journal, technical features of the journal, author charges, local visibility, professionalism, influence, credibility and prestige of the journal, and the likelihood of acceptance";

 Other features: "impact on scientists and practitioners, the potential impact or visibility of the article, communication strategies, negotiations with coauthors, and philosophical and ethical issues".

Other categories have also been proposed. For instance, Björk and Öörni (2009) in their "net value of submission" model classify 30 factors under four categories: *journal prestige, readership, performance and infrastructure*. Lee et al. (2020) review 33 factors identified in the literature and their survey of authors who publish in information science and library journals. They come up with 15 dominant factors which can be divided among five categories: *peer review, prestige, infrastructure, readership and performance*. It appears that the factors highlighted and analyzed in different studies tend to overlap to a large extent (see Frandsen, 2019 for a literature review).

Research also shows that the relative importance of these factors tends to vary across disciplines (Bröchner & Björk, 2008; Dalton, 2013; Gordon, 1984; Lee et al., 2020; Lusk & Hudson, 2009; Luukkonen, 1992; Wijewickrema & Petras, 2017). For instance, Wijewickrema and Petras (2017) report, that compared to social science researchers, the authors in the discipline of medicine tend to pay more attention to the impact factor and whether a given journal is included in indexing services. Also taken into account are the prestige of the publisher, and online submission and tracking services.

Overall, it appears that a journal's attributes like reputation, readership, decision lags,<sup>1</sup> acceptance rate and review quality tend to be the top determinants of where scholars submit their work (Björk & Öörni, 2009; Oster, 1980; Pepermans & Rousseau, 2016; Śpiewanowski & Talavera, 2021; Unutmaz Durmuşoğlu et al., 2021). Unutmaz Durmuşoğlu and Durmuşoğlu (2021), for instance, use a dataset of published articles referring to "environmental risk" in order to identify which factors have the greatest impact on the journal in which a given paper is published. The results of their model show that the acceptance rate tends to be the most important criterion that the authors consider when selecting a suitable outlet. This is followed by scope similarity (the most cited journals in a given paper tend to be the ones where the paper is eventually published) and time to first decision.

There have been relatively few studies focusing on author's characteristics. Apart from research excellence and past publication experience, it is likely that individual features such as gender, risk tolerance, overconfidence, and time preferences could play a role in determining submission strategies. We address these below.

#### Overconfidence, risk and time preferences

It has been argued that positivity bias, notably overconfidence and excessive optimism, may significantly influence the choice of a journal (Crack et al., 2011). There is some evidence that people tend to overestimate their ability in most situations. In our case, the authors may systematically overestimate the quality of their papers and thus choose overly prestigious journals that are very unlikely to accept them. Overconfidence could be balanced by such factors as risk aversion and impatience, because targeting lower-ranked journals

<sup>&</sup>lt;sup>1</sup> Several studies show that delay in academic publishing may be optimal (Lee, 2009; Muller-Itten, 2017). In particular, delay, apart from submission fees, is considered to be a "filtering device" that increases author-journal matching efficiency.

results in a more certain reward; and one that is sooner. The model of Heintzelman and Nocetti (2009), for instance, predicts that risk-neutral and patient authors submit their work to top-tier journals, while impatient and risk-averse authors submit to second- or third-tier journals depending on the paper's quality.

#### Gender differences

While overconfidence, risk acceptance, and patience are generally unobservable, they may have visible correlates, notably gender. Gender differences on these dimensions might lead to differences in submission strategies. A number of studies using different samples, including students, stock traders, and professionals (Barber & Odean, 2001; Charness & Gneezy, 2012; Thöni & Volk, 2021) find greater overconfidence and greater risk-seeking in men, although null results were also sometimes reported (Deaves et al., 2010; Hardies et al., 2013; see also the critical review of literature on risk by Filippin & Crosetto, 2016). The situation is less clear in the case of time preference: although several studies (Bettinger & Slonim, 2007; Castillo et al., 2011; Dittrich & Leipold, 2014) report that men tend to be more impatient, Golsteyn et al. (2014) find the opposite and several studies observe no difference (Thöni & Volk, 2021).

Although moderate gender differences in risk taking and overconfidence plausibly exist in the general population, it is an open question if they survive self-selection and socialization typical for academia (Hardies et al., 2013; Nekby et al., 2008). In their Study 1, Drupp et al. (2020) find that the gender risk gap in academics is reduced (and disappears in older individuals) when their professional (rather than private) identity is made salient by asking, in a preceding task, about the professional rather than private life. Such a manipulation affected women's (but not men's) risk aversion, the professions' seemingly prevailing norm of high risk acceptance modifying their home-grown preferences. It should be noted however, that the authors fail to replicate their results in Study 2; it is also difficult to say if they would carry over to non-financial risk taking.

Concerning the authors whose papers get rejected (which is to say—almost all of us), gender difference in willingness to compete after a negative feedback (observed, in student samples, by Buser (2016) and Buser and Yuan (2019)) might affect future submission patterns. Specifically, females might be willing to submit to lower-ranked journal than males after a rejection, thus decreasing their chances for a publication in a prestigious outlet. Overall, thus, there are some reasons to hypothesize that male academics will tend to be more ambitious in their choice of journals. Yet, as of now there has only been limited and mixed evidence. Gravert and Sørensen (2020) surveyed nearly 100 young economists graduating at top-50 universities (RePec world ranking), asking about the submission order of the top paper they had written during their PhD curriculum (known in economics as job market papers); and in so doing they elicited risk, time, and competitive preferences, as well as grit. No gender differences in submission strategies were found; this is perhaps not surprising given that gender differences in measured traits were also small or non-existent.

This finding contrasts with the results obtained by Djupe et al. (2019) (see also Teele & Thelen, 2017) who compared the submission strategies of male and female political scientists. Based on their self-reports, relatively few female authors submit their work to the top three journals and relatively many female authors submit to a journal "that is most likely to accept" their work. This, however, could be partly due to systematic differences in the contents. For example, males tend to write/submit more quantitative articles (Beneito et al, 2021). Likewise, it is not completely clear whether and to what extent risk and time

preferences play a role in these submission differences. Djupe et al. (2019) also suggest that co-authorship tends to amplify gender differences: it increases the number of submissions and publications of males to a greater extent than those of females.

A clearly understudied question is if males and females devote the same amount of time and attention to planning their submissions. It is a common perception that male scholars have more time for research, mostly because they devote less time to academic service (Guarino & Borden, 2017) and domestic chores (Jolly et al., 2014; Mandel et al., 2020). Interestingly though, the evidence that men actually do more hours of research is very limited (Bentley & Kyvik, 2013; Ceci et al., 2014). Still, it is plausible that, within the same time devoted to research, men (being more competitive on average) think more about possible publication strategies (while women perhaps focus more on the research for its own sake). That may lead men to consider a larger number of possible outlets, as well as to submit their papers to more prestigious journals (as it seems to pay off); but also to journals giving a greater chance of success for the paper in question, and without compromising on the prestige of the journal. We are not aware of earlier research that would shed light on these questions.

#### Team composition

Gender may also play a role if the decision is made by a team. The presence of a man (but not necessarily men only) may trigger risk taking (Bansak et al., 2011; Bogan et al., 2013), and perhaps partly because men are relatively willing to lead their teams (Born et al., 2020). On the other hand, in the case of an investment bank portfolio, more women in the executive team were associated with higher portfolio risks (Berger et al., 2014). Castillo et al. (2020) also suggest that women take more risks as the fraction of males increases in the room, even if their presence or actions do not affect the payoffs. Also, being in a team was found to enhance women's willingness to compete (Healy & Pate, 2011). Hence, risk-taking and the competitive preferences of females in teams seem to greatly depend on the context. Elsaid and Ursel (2011) find that more women in an executive board is associated with a higher likelihood of selecting a female CEO and that changing a CEO from a man to a woman decreases corporate risk-taking.

#### Summary of prior literature

To summarize, the existing literature clearly hints at ways in which submission strategies may be affected by the gender of authors. However, direct verifications are scattered and troubled by small sample sizes, focus on top journals/universities only, and/or possible uncontrollable difference in quality of papers. We seek to reduce the latter problem by sampling journals rather than authors. We can thus compare submission strategies for papers that ended up at equally prestigious journals.

# Methods

#### Journals, papers and author data

In this project, we focused on three scientific fields: economics (econ), environmental sciences (env), and history (hist). We chose these three because they represent three

major areas of science (social sciences, natural sciences, and humanities, respectively). Subject to this constraint, when choosing the fields, we avoided disciplines that are known to be dominated by one gender, such as mathematics (Huang et al., 2020; Larivière et al., 2013). Additionally we chose fields with a relatively low number of authors per paper (Abramo & D'Angelo, 2015). Identifying gender effects would have been much harder in disciplines in which most papers have a large team of authors. While we would have liked to cover more fields, it would have been difficult given that our approach is time-consuming.

First, we downloaded the list of all journals from the "Scientific Journal Rankings" (scimagojr, SJR) in these subject areas. Next, for every journal, we looked for the list of very recent publications (published between January 1, 2020 and the date of data collection, July 28, 2020) on Scopus and exported the data available. We then dropped all the publications for which no corresponding author (henceforth, CA) was indicated and those for which the CA's email address was missing. From the resulting database, we drew a random sample of 4800 English-language publications (1800 in econ, 1500 in env and 1500 in hist; the sample of econ papers was a bit larger because we used two different ways of data collection; see the survey procedures under "survey data" below).

In addition, based on an automated python script using the title of publication, we looked for the profiles of all the authors of these 4800 articles on Google Scholar and ORCID in order to obtain additional information: full name (of the co-authors only, as we had CA's full name from Scopus database), the list of publications (including the title and year of publication), the number of citations and the Hirsch index (h-index). Using this data, we calculated additional measures. First, "years active", a measure of experience and seniority (which may differ by gender), was calculated as the number of years that passed (by 2020) since the CA's first publication (listed on Google Scholar).

Second, we created a variable measuring the share of CA's publications that were in English. We did so with the help of python package langdetect applied to each publication title.

Third, we created a dummy variable indicating whether the CA is a "theorist", a proxy for the type of research and subfield represented (which, again, is likely to correlate with gender). Clearly, the term "theorist" is not well defined or easily operationalizable. We constructed a crude indicator as follows. Based on common sense and visual inspection of all CAs' publications, we created a list of keywords likely to signal at least some theoretical contribution in a publication, consisting of the terms understand\*, interpret\*, theor\*, teor\*, mathem\*, matem\*, concept\*, method\*, model, framework, where "\*" stands for any string of letters (so that e.g. "theoretical" but also German or Dutch "theoretisch\*" are included). We then categorised the CA as a "theorist" if they had at least one publication the title of which contained at least one of these keywords.

Finally and most importantly, we tried to identify the gender of all the authors based on names from Google Scholar profiles by using a python package gender-guesser, version 0.4.0. We took a conservative approach by treating the "mostly male" and "mostly female" verdict of gender-guesser as inconclusive. Unfortunately, this means that gender remains uncertain for as many as 34.14% of the sampled authors. Because of the important role that gender plays in our investigation, among those CAs who responded to our questions, but whose gender was uncertain, we established it manually. Towards this goal, a research assistant was instructed to visit the Google Scholar and/or professional website of the author in question and locate relevant pronouns ("In his research, prof. Jones uses…" etc.) or establish the gender, if possible, by the author's photograph. This procedure is very time-consuming and running it for all the authors would have produced little additional insight; it was thus restricted to those CAs who responded. Both sources of gender information were used to calculate the number of male and female authors per article.

#### Survey data

Between August and December 2020, we contacted all the CAs by sending an e-mail from the university account of one of the authors, asking about past rejections and potential alternative journals for that specific published paper (see the email template in Appendix 1). In the e-mail, we stated that we were asking for these data mostly so as to investigate the usefulness of automated journal suggesters. We believe it reduced the probability that the responders would see the reported past rejections and alternative outlets as possibly signaling their confidence, risk preference etc. This method has been approved by the ethics committee at the Faculty of Economic Sciences at the University of Warsaw.

Starting out with the field of economics, we first checked whether there would be differences in the response rate if the email contained a link to a web survey containing our questions, instead of asking them directly in the body of the e-mail. Assigning a randomly selected half of papers to each method, we observed a slightly lower response rate for the link (22.1% vs. 25.6%). Moreover, e-mail responses usually included more information about publication strategies and the use of automated journal suggesters. We thus used this approach for the other two disciplines.

The overall response rate across all disciplines was 21.9%, resulting in 1111 usable responses. The responses to our questions were recorded and the authors were thanked for their input. The statistics of the authors who responded are provided in Table 1. Selection patterns are addressed in Table 5 in Appendix 1.

## Predictions

#### Measures

We proposed three measures for our authors' submission strategies. First, we looked at the number of past rejections of a given paper. It was assumed that a greater number of rejections corresponds to a higher (over)confidence, because it suggests that the paper was repeatedly sent to an overly prestigious journal, apparently because its authors believed it was good enough to have a chance of being accepted.

Second, confidence could also be measured by journal rank change after a rejection, defined as the difference between the ranks of the journal where the paper ends up and where it is submitted initially.

#### *Rank change* = *Rank published* – *Rank first submission*

We made recourse to the Scientific Journal Rankings (SJR) rank which ranges from 0.1 (least prestigious journals) to 88.192 (*Ca-A Cancer Journal for Clinicians*). As it turns out, in the sample of 1111 papers whose CAs responded, the highest rank was 17.134 and the vast majority were ranked between 0 and 3. As expected, rank changes tend to be negative, with a large negative rank change meaning that the paper ended up in a much less prestigious journal than the author(s) initially had hoped for, again signaling (over)confidence. Naturally, we set *Rank change* = 0 if the article is published at the first attempt.

	Eco	Env	His
Number of articles	440	240	431
Avg. number of authors	3.02	5.00	1.47
Std. dev of number of authors	2.733	4.317	1.155
% of articles with 1, 2, 3, 4+ authors	[15, 32, 27, 27]	[8, 13, 15, 64]	[76, 14, 5, 6]
Avg. number of rejections reported	0.89	0.38	0.18
Std. dev of number of rejections	1.315	0.776	0.569
% of articles with 0, 1, 2, 3+rejections	[57, 20, 12, 12]	[75, 17, 5, 3]	[88, 9, 2, 1]
Avg. number of alternatives reported	1.39	1.58	1.28
Std. dev of number of alternatives	1.428	1.542	1.415
% of articles with 0, 1, 2, $3 +$ alternatives	[37, 24, 18, 22]	[35, 17, 23, 25]	[43, 18, 18, 21]
% of female CA (if gender known)	22.4	30.4	32.8
% of CA's for which a GS profile was found	72	49	43
Avg. h-index of CA based on GS	16.41	18.64	12.98
Avg. number of citations of CA based on GS	2349.53	2880.19	1551.83
Avg. number of texts of CA based on GS	96.14	138.42	96.64
Avg. number of female authors	0.342	0.461	0.339
Avg. share of female authors	0.125	0.130	0.287
Avg. rank (SJR score)	1.566	1.406	0.346
Std. dev of rank (SJR score)	1.640	1.054	0.339
Avg. years active	17.69	17.37	21.47
Avg. CA theorist	0.187	0.099	0.121
Avg. CA share of English titles	0.891	0.883	0.767

 Table 1
 Statistics of the authors who responded (1111 authors)

CA corresponding author, GS google scholar

The third measure was based on the reported number of alternative journals. A low value suggests that the author(s) had not thought that much about their follow-up strategy in the case of a rejection at the current journal, either because they did not have much time for this or because they were very confident it would be accepted.

## Gender

Following the literature, we expect men to be more overconfident, meaning more past rejections, greater rank reduction (more negative rank change) and fewer alternatives. In other words, men initially would tend to submit to "better" journals and, consequently, would be more likely to get rejected (perhaps several times) and end up in a much less prestigious one. Being more confident about the acceptance, men would also tend to have fewer alternative journals.

On the other hand, given the findings that women tend to be more responsive to negative feedback, an alternative hypothesis could be formulated for the rank change measure, namely that it is more negative for *women*. Finally, assuming that men are more eager to engage in publishing as a competitive game and that they may devote more time and attention to their submission strategy, they may end up considering *more* alternative journals.

### Findings

In this section we succinctly report the results, focusing on the three measures indicated earlier: rank change, the number of rejections and the number of alternatives. We run the regressions using "general to specific" approach, meaning iterative elimination of variables from an initial general model with a large number of explanatory variables. We use the Poisson regression, which is appropriate given that the dependent variables are (small) integers. Table 2 summarizes results for the number of past rejections. Not surprisingly, there are significant differences among the three disciplines: compared to econ, hist and env scholars tend to have fewer past rejections. Also, more experienced authors, as measured by the h-index, tend to have slightly fewer rejections, however the effect is not significant for the number of years they have been active professionally. The share of English language papers and our simple "CA theorist" measure are also insignificant for past rejections. Most importantly, articles with a male CA tend to have a higher number of past rejections, confirming our hypothesis about male overconfidence. Likewise, teams of authors with a higher female ratio (the number of authors identified as women divided by the number of authors identified as men or women) tend to have fewer rejections. On the other hand, the number of authors per se seems to have a smaller and less robust effect on the number of rejections.

Turning now to rank change (Table 3), we see that, again, there are differences between the fields: environment and history researchers tend to have lower rank reductions (in other words, less negative rank changes) than economics authors. Seeking to verify our hypotheses, we observe no evidence that characteristics of the CA or the team that we tested affect journal rank change.

Looking at the number of alternative journals as dependent variable (Table 4), we see that male CAs tend to report more alternatives. That would imply that our hypothesized competitive strategizing effect is stronger than the overconfidence effect, although the possibility of gender-specific misreporting of alternatives is also difficult to rule out (see possible limitations in the discussion and conclusions section below). The number of authors has no effect on the number of alternatives. By contrast, past experience, as measured by years of professional activity (but not h-index) has a slight negative impact on the number of alternatives (this significance remains in place in all other specifications we run; one model is reported here aiming to keep the table concise). Again, our "CA theorist" measure is not significant. However, interestingly, "CA share of English titles" measure has a slight positive significance for the number of alternatives, meaning that higher share of English language publications is associated with higher number of alternatives. One explanation is that those who publish predominantly in English simply have more outlets to consider. Another possibility could be that their target audience is wider, so they are not oriented towards one particular country, hence, again, they have more journals to consider.

Table 2	Poisson regi	ression resu	lts for the n	number of r	ejections										
	1	2	3	4	5	6	7	80	6	10	11	12	13	14	15
Environ- ment	- 0.85*** (0.12)	$-0.83^{***}$ (0.12)	- 0.84*** (0.12)	- 0.89*** (0.12)	$-0.87^{***}$ (0.12)	$-0.75^{***}$ (0.13)	$-0.89^{***}$ (0.12)	-0.95*** (0.17)	- 0.92*** (0.17)	-0.9*** (0.17)	- 0.88*** (0.12)	- 0.9*** (0.12)	- 0.86*** (0.12)	-0.9***(0.17)	- 0.91*** (0.17)
History	$-1.6^{***}$ (0.12)	$-1.6^{***}$ (0.12)	$-1.4^{***}$ (0.15)	$-1.5^{***}$ (0.14)	- 1.4*** (0.15)	- 1.3*** (0.15)	$-1.5^{***}$ (0.14)	- 1.7*** (0.19)	$-1.6^{***}$ (0.2)	- 1.5*** (0.19)	- 1.4*** (0.15)	$-1.5^{***}$ - (0.14) (0	- 1.4*** (0.15)	- 1.5*** (0.2)	- 1.6*** (0.2)
CA male	1	0.35*** (0.11)	0.35*** (0.11)	0.35*** (0.11)	0.35*** (0.11)	0.33*** (0.11)	1	0.55*** (0.15)	0.55*** (0.15)	0.51*** (0.15)	1	1	_	$0.5^{***}$ (0.15)	0.5*** (0.15)
Single author	I	I	- 0.21* (0.13)	I	- 0.13 (0.17)	I	I	1	- 0.43** (0.21)	- 0.42** (0.21)	- 0.12 (0.17)	1	- 0.18 (0.13)	- 0.42** (0.21)	- 0.43** (0.21)
Log number of	1	I	1	0.13* (0.075)	0.075 (0.1)	0.13* (0.075)	0.1 (0.075)	- 0.054 (0.094)	- 0.24* (0.14)	- 0.26* (0.14)	0.055	0.1 (0.076)		- 0.24* (0.14)	- 0.24* (0.14)
Survey with a link	I	I	I	I	I	0.29*** (0.1)	I		I	I		ľ			I
Female ratio	I	I	I	I	I	I	$-0.53^{***}$ (0.18)		I	1	- 0.53*** (0.18)	- 0.53*** - (0.18) (	- 0.54*** (0.18)		I
CA h-index all	I	I	I	I	I	I	-	- 0.012*** (0.004)	$-0.012^{***}$ (0.004)					I	I
Years active	I	I	I	I	I	I			I	- 0.0045 . (0.004)		I		1	1
Actual journal rank	I	I	I	I	1	1			I	1	- 0.0092 (0.03)	- 0.0085 - (0.03)	- 0.0084 (0.03)	1	1
CA theo- rist	I	I	I	I	I	I			I					0.18 (0.11)	1
CA share of English titles	1	I	1	I	I	1	1		1						- 0.26 (0.31)

<u>ح</u>	3
0	D,
- 5	2
- 5	=
-74	Ξ.
<u>ې</u>	=
_ <	⊃.
<ul> <li></li> </ul>	)
~	~
C	N
	D
-	E.
_	2
	σ
-	-

	-	2	ю	4	5	9	7	8	6	10	11	12	13	14	15
Intercept	- 0.12** (0.051)	$-0.41^{***}$ (0.11)	$-0.38^{***}$ (0.11)	-0.53*** (0.13)	$-0.46^{**}$ (0.16)	$-0.66^{**}$ (0.14)	- 0.16* (0.092)	- 0.27 (0.17)	- 0.034 (0.21)	- 0.091 (0.21)	- 0.085 (0.14)	- 0.15 (0.1)	- 0.025 (0.074)	-0.24 (0.21)	0.051 (0.34)
12	0.098	0.105	0.106	0.104	0.105	0.110	0.104	0.122	0.124	0.115	0.105	0.104	0.105	0.114	0.117
Pseudo r2	0.098	0.103	0.104	0.104	0.104	0.107	0.103	0.114	0.117	0.110	0.104	0.103	0.104	0.111	0.109
Observa- tions	1111	1111	1111	1111	1111	1111	1111	618	618	611	1111	1111	1111	611	611
Standard	errors are 1	reported in t	the parenthe	eses; "CA h	n-index all"	, "years act	ive", "CA	theorist" a	nd "CA shar	e of Englis	h titles" ar	e calculate	d using the	CA's goo	gle scholar

profile information (which could not always be found, hence the lower number of observations)

p < 0.10, p < 0.05, p < 0.01, p < 0.01

Table 3 OLS regres	sion results	for rank chan	ıge									
	1	2	3	4	5	6	7	8	9	10	11	12
Environment	$0.93^{***}$ (0.19)	$0.89^{***}$ (0.19)	$0.9^{***}$ (0.19)	$0.89^{***}$ (0.19)	$0.86^{***}$ (0.2)	$0.86^{**}$ (0.2)	$0.86^{***}$ (0.2)	$0.58^{***}$ (0.21)	$0.96^{***}$ (0.33)	$1.1^{***}$ (0.32)	$1.1^{***}$ (0.32)	$1.1^{***}$ (0.32)
History	$1.1^{***}$ (0.16)	$0.78^{***}$ (0.17)	0.7*** (0.21)	$0.78^{***}$ (0.18)	$0.82^{***}$ (0.19)	$0.82^{***}$ (0.2)	0.81*** (0.2)	0.47** (0.2)	0.85*** (0.32)	$0.7^{**}$ (0.3)	$0.71^{**}$ (0.3)	$0.65^{**}$ (0.31)
Actual journal rank	I	- 0.23*** (0.06)	- 0.22*** (0.061)	- 0.23*** (0.06)	- 0.23*** (0.061)	$-0.23^{***}$ (0.061)	$-0.23^{***}$ (0.061)	- 0.23*** (0.06)	$-0.45^{***}$ (0.11)	$-0.42^{***}$ (0.1)	$-0.43^{***}$ (0.1)	- 0.42*** (0.1)
Single author	I	I	0.13 (0.19)	I	I	I	I	I	I	I	I	I
CA male	I	I	I	- 0.014 (0.16)	I	- 0.015 (0.16)	I	I	- 0.11 (0.28)	I	I	I
Log number of authors	I	I	I	I	0.062 (0.13)	0.062 (0.13)	0.073 (0.13)	I	0.34 (0.22)	I	I	I
Female ratio	I	I	I	I	I	I	0.12 (0.22)	I	I	I	I	I
Survey with a link	I	I	I	I	I	I	I	- 0.68*** (0.22)	I	I	I	I
CA h-index all	I	I	I	I	I	I	I	I	- 0.0066 (0.008)	I	I	I
Years active	I	I	I	I	I	I	I	I	I	0.0026 (0.008)	I	I
CA theorist	I	I	I	I	I	I	I	I	I	I	- 0.034 (0.27)	I
CA share of English titles	I	I	I	I	I	I	I	I	I	I	I	- 0.62 (0.64)
Intercept	$-1.1^{***}$ (0.11)	-0.77*** (0.15)	$-0.8^{***}$ (0.15)	$-0.76^{***}$ (0.2)	- 0.83*** (0.18)	$-0.81^{***}$ (0.23)	- 0.85*** (0.19)	$-0.46^{**}$ (0.18)	- 0.72* (0.38)	$-0.7^{**}$ (0.28)	- 0.64** (0.25)	- 0.12 (0.6)
r2 Decido 20	0.043	0.055	0.056	0.055	0.056	0.056	0.056	0.063	0.069	0.065	0.064	0.066
LScuuo 12	0.044	100.0	100.0	100.0	1000	100.0	100.0	con.0	1/0.0	0.000	0.000	0.000

	(1)											
	1	2	Э	4	5	9	7	8	6	10	11	12
Observations	1111	1111	1111	1111	1111	1111	1111	1111	618	611	611	611
Standard errors a	re reported i	in the parently	neses; Recall	that lower va	lues of rank	change corre	spond to hig	her rank redu	ction. "CA h	n-index all",	"years active"	, "CA theorist"

and "CA share of English titles" are calculated using the CA's google scholar profile information (which could not always be found, hence the lower number of observations) p < 0.10, p < 0.05, p < 0.01, p < 0.01

Table 4 Poisson regression	results for th	ne number of	f alternative	S								
	1	2	3	4	5	6	7	8	6	10	11	12
Environment	$0.13^{*}$ (0.065)	$0.14^{**}$ (0.065)	$0.14^{**}$ (0.066)	0.13* (0.069)	$0.18^{**}$ (0.079)	0.13** (0.065)	0.14** (0.065)	$0.16^{*}$ (0.086)	$0.18^{**}$ (0.086)	0.15** (0.066)	$0.18^{**}$ (0.086)	$0.18^{**}$ (0.086)
History	-0.086 (0.059)	- 0.063 (0.059)	-0.017 (0.073)	-0.043 (0.067)	0.014 (0.078)	- 0.058 (0.06)	-0.074 (0.06)	0.011 (0.078)	0.05 (0.079)	- 0.0099 (0.064)	0.018 (0.078)	0.062 (0.08)
CA male	- - 1	$0.2^{***}$ (0.061)	$0.2^{***}$ (0.061)	$0.2^{***}$ (0.061)	$0.2^{***}$ (0.061)	I	$0.29^{**}$ (0.11)	0.32*** (0.087)	$0.31^{***}$ (0.087)	$0.2^{***}$ (0.061)	0.3*** (0.087)	$0.3^{***}$ (0.087)
Single author	I	I	-0.077 (0.07)	I	I	I	I	I	I	I	I	I
Log number of authors	I	I	I	0.03 (0.046)	0.029 (0.046)	I	I	I	I	I	I	I
Survey with a link	I	I	I	I	0.12 (0.081)	I	I	I	I	I	I	I
Female ratio	I	I	I	I	I	$-0.18^{**}$ (0.083)	0.14 (0.15)	I	I	I	I	I
CA h-index all	I	I	I	I	I	I	I	- 0.003 (0.002)	I	I	I	I
Years active	I	I	I	I	I	I	I	I	$-0.0078^{***}$ (0.002)	I	I	I
Actual journal rank	I	I	I	I	I	I	I	I	I	0.042** (0.019)	I	I
CA theorist	I	I	I	I	I	I	I	I	I	I	0.0031 (0.076)	I
CA share of English titles	I	I	I	I	I	I	I	I	I	I	I	$0.39^{**}$ (0.19)
Intercept	0.33*** (0.04)	0.17*** (0.065)	$0.18^{***}$ (0.065)	$0.14^{*}$ (0.078)	0.086 (0.086)	0.35*** (0.041)	0.084 (0.11)	0.14 (0.092)	0.24** (0.096)	0.098 (0.073)	0.11 (0.091)	- 0.23 (0.19)
r2 Pseudo r2	0.006	0.012 0.006	0.013 0.006	0.013 0.006	0.014	0.009 0.004	0.013 0.006	0.019 0.009	0.028 0.013	0.015 0.007	0.017 0.008	0.021

$\sim$
÷
ര്
- <b>3</b>
• =
E
5
-
0
ુ
ુ
د ۲
<b>e 2</b> (c
ole 2 (c
ible 2 (c
Table 2 (c

	1	2	3	4	5	9	7	8	6	10	11	12
Observations	1111	1111	1111	1111	1111	1111	1111	618	611	1111	611	611
Standard errors are report	ted in the par	rentheses; "	CA h-index a	ull", "years a	active", "C	A theorist"	and "CA sh	rre of English	titles" are c	alculated using th	e CA's goo	gle scholar

profile information (which could not always be found, hence the lower number of observations)

p < 0.10, p < 0.05, p < 0.01, p < 0.01

# Discussion

Clearly, our novel approach to investigating journal choice is not free of limitations and caveats. Most importantly, we conducted a survey with no incentives for truth-telling and we were not in a position to confirm the veracity of the collected data using publishers' records. Participants may have genuine difficulty recalling past rejections and alternative plans. They may also strategically omit some items (or, a less likely possibility—make them up) in order to make a better impression. For example, they may be ashamed to admit that a paper ending up in a mediocre journal was initially submitted to an excellent one. On the other hand, such a situation need not always mean overconfidence or bad planning; so it would seem that the shame involved in revealing it to a stranger who does not know the project would be limited. This is especially true given that we (truthfully) stated that the project is about journal suggesters, which shifts the focus from a journals' prestige (vertical comparisons) to their scope (horizontal comparisons) and from the efficacy of the responders (the authors), to that of the mindless robots/algorithms (the suggesters). Moreover, some authors may be ashamed that they have been rejected by a bad journal, in which case these two effects could partially cancel each other out in the calculations of our rank change measure. By contrast, the number of past rejections, which is arguably strikingly small, was most probably often underreported and should thus be cautiously treated as a lower bound. It is also quite possible that participants did not always mention the journals in the right chronological order, which may have affected our rank change measure. Besides, there are limitations in terms of data availability; for example, we can only identify gender and professional experience in a subset of authors.

It may be noted that, within each of our three fields, gender distribution varies by subfield. If our dependent variables also depend substantially on subfield, estimates of gender effects obtained without proper control for sub-discipline may thus be biased. The challenge is that it would be difficult to define subfields in a manner consistent across our three very different disciplines. Moreover, numbers of observations would necessarily be very unequal and in some cases very low. Besides, it is very difficult to categorize the authors into a single subfield, as many of them can belong to more than one (e.g., involved in micro- and macro-economics, or environment and economics simultaneously). One approach would be to categorize the papers instead of the authors using pre-defined SJR journal categories, however the same problem emerges: many publications in our sample are in journals that belong to several categories, often from different fields (e.g., *Political Geography* is categorized under "history" as well as "social and political science" categories). Nevertheless, the analyses involving "CA theorist" measure should partially address this concern, as some subfields are more "theoretical" than others. The same is true for the "CA share of English titles" variable. While evidently not accounting for subtle differences between various subfields, our identification strategy is consistent across the three disciplines and compatible with the sample size. The key observation is that controlling for "CA theorist" and "CA share of English titles" in the models does not substantially change the estimate for "CA male", meaning that gender differences persist irrespective of the field represented (more vs. less theoretical, more vs. less international).

Our finding of greater confidence in males (as measured by the number of past rejections) confirms earlier reports coming from other domains, such as finance and management (Barber & Odean, 2001; La Rocca et al., 2020). A few instances of the authors' replies to the open-ended question about the journal selection criteria also confirm the importance of journal choice factors discussed in the literature (Lee et al., 2020). For instance, one of our respondents mentions: "For every journal article I write, I create a "ranking" of possible journals to submit it to, which I rate according to impact factor, how well it fits the subject and style of my article". Reading through the comments, one also gets the impression that experienced researchers know the relevant target journals in their field, while younger scholars tend to rely on the advice of colleagues or supervisors (Dalton, 2013).

# Conclusions

The aggregate picture that our alternative measures yield is that male authors (and maledominated teams) pursue a more aggressive publication strategy, continuing with their submissions to relatively good journals and planning more potential submission targets in the face of past rejections. Indeed, the number of females in a team is negatively related to the number of rejections and, weakly, to the number of alternatives. Likewise, the male gender of the CA is associated with more rejections and alternatives.

Even if males experience more rejections overall, they also have more chances. Given the inherently random nature of the refereeing process, their strategy thus gives them a greater probability of ending up in a prestigious journal. It might also give them a greater possibility for achieving publication in *some* journal. Indeed, suppose an author has a threshold of journal prestige below which they will not submit. The faster they lower the prestige of the targeted journal, the more likely they will fall below the threshold, thus increasing the chance that the paper never gets published at all. The fact that males are more forward-looking, and consider more alternative outlets, also gives them an edge here. Moreover, submissions are not independent. Once an author has publications in highly-ranked journals, their improved reputation is likely to help publish more in the future. These differences can thus contribute to the observed gender difference in publishing records.

These effects could also have a bearing for the choice of the subfield. In economics for example, leading, prominent journals of some specialties (like econometrics, macroeconomics, and financial economics) are extremely selective, which might partly explain why women tend to shy away from these subfields, choosing demography, labor, or poverty economics instead. As Beneito et al. (2021) show, the fraction of female researchers is below 20% in the former three and above 40% in the latter three subfields. Choosing to focus on demography rather than econometrics is tantamount to recognizing that one will never publish in *Econometrica*; in view of our findings, it is very plausible that such a concession usually comes more easily for women. Again, a larger study, allowing for a finer operationalisation of subfields (rather than just our crude "CA theorist" measure), could shed some light on this conjecture.

Likewise, there are very few women (about 14%) to be found in highly mathematical, prestigious subfields of computing, such as programming languages, numerical & scientific computing, or the theory of computer science. Less coveted subfields, such as interdisciplinary computing or human–computer interaction see more balanced numbers, although women still only comprise 20% of the whole.

Among other things, these observations emphasize the importance of mentoring programs (Blau et al., 2010). They could encourage female scholars to be not only more confident but also more strategic and forward-looking in their journal choice strategies.

# Appendix 1

## Email text

Subject: Question about [title of the paper].

"Dear Professor [surname],

It is my understanding that your paper [title of the paper] was recently published in the [journal name]. Congratulations!

I would very much appreciate if you were willing to share.

- 1. What other journals you had previously submitted it to; and
- 2. Which journals could be considered as reasonable outlets (for example if the paper was rejected in the [journal name])

You may wonder why I would need such information. I am running a study aimed at finding out to what extent online automated journal finders are useful. One way to check it is to compare their suggestions with those provided by human experts (such as the authors). I would therefore also very much appreciate if you let me know if you have actually used one of these finders for this project.

I hereby declare that whatever information you choose to share will be treated as confidential and only reported jointly and it will not be possible to match your name with any specific data point. However, I will also be happy to acknowledge your assistance in any publication resulting from this project if I get your consent to do so.

Best regards,

"Michal Krawczyk".

See Table 5.

Table 5 Responding to the e-mail:	: selection effec	sts								
	1	2	3	4	5	9	7	8	6	10
Environment	$-0.46^{***}$ (0.089)	$-0.41^{***}$ (0.091)	$-0.41^{***}$ (0.091)	$-0.36^{***}$ (0.092)	$-0.35^{***}$ (0.096)	$-0.39^{***}$ (0.091)	$-0.52^{***}$ (0.1)	$-0.43^{***}$ (0.12)	$-0.45^{***}$ (0.12)	$-0.45^{***}$ (0.12)
History	0.27*** (0.079)	0.085 (0.081)	0.087 (0.081)	$0.19^{**}$ (0.088)	- 0.0023 (0.093)	-0.04 (0.1)	- 0.02 (0.096)	0.12 (0.11)	0.15 (0.11)	0.078 (0.12)
CA female & mostly female (gg)		- 1	1 *** (0.26)	$1^{***}$ (0.26)	$1^{***}$ (0.26)	$1^{***}$ (0.26)	$1^{***}$ (0.26)	0.56 (0.36)	0.6* (0.36)	0.56 (0.36)
CA male & mostly male (gg^)	I	I	$1.4^{***}$ (0.17)	$1.5^{***}$ (0.17)	$1.4^{***}$ (0.17)	$1.4^{***}$ (0.17)	$1.4^{***}$ (0.17)	0.98*** (0.24)	1*** (0.24)	1*** (0.24)
CA gender unknown (gg)	I	$1.5^{***}$ (0.14)	$1.5^{***}$ (0.14)	$1.5^{***}$ (0.14)	$1.5^{***}$ (0.14)	$1.5^{***}$ (0.14)	$1.5^{***}$ (0.14)	$1.1^{***}$ (0.2)	$1.2^{***}$ (0.2)	$1.1^{***}$ (0.2)
CA female (gg)	I	$1.1^{***}$ (0.3)	1		I	- I		I	- I	- I
CA male (gg)	I	$1.5^{***}$ (0.17)	I	I	I	I	I	I	I	I
CA "mostly" female (gg)	I	0.95** (0.44)	I	I	I	I	I	I	I	I
CA "mostly" male (gg)	I	$0.95^{***}$ (0.36)	I	I	I	I	I	I	I	I
Actual journal rank	I	I	I	$0.084^{***}$ (0.03)	I	I	I	I	I	I
Log number of authors	I	I	I	I	-0.13* (0.066)	I	I	I	I	I
Single author	I	I	I	I	I	0.21** (0.098)	I	I	I	I
Survey with a link	I	I	I	I	I	I	$-0.23^{**}$ (0.11)	I	I	I
Years active	I	I	1	1	1	1	1	$0.0082^{**}$ (0.003)	I	1

Table 5 (continued)										
	-	2	ю	4	5	9	7	~	6	10
CA theorist	I	1	I	I	1	1	I	I	-0.19* (0.11)	1
CA share of English titles	I	I	I	I	I	I	I	I	I	$-0.51^{*}$ (0.27)
Intercept	$-1.2^{***}$ (0.055)	- 2.4** (0.14)	- 2.4*** (0.14)	- 2.6*** (0.15)	- 2.3*** (0.16)	$-2.4^{***}$ (0.14)	- 2.3*** (0.15)	- 2.1*** (0.2)	$-1.9^{***}$ (0.2)	$-1.5^{***}$ (0.32)
LLF	-2561.0	- 2480.4	-2481.7	- 2468.3	- 2479.8	- 2479.5	- 2479.7	- 1287.6	- 1289.0	- 1288.8
Roc auc score	0.5752	0.6239	0.6224	0.6253	0.6258	0.6254	0.6248	0.6080	0.6051	0.6024
Observations	4792	4792	4792	4749	4792	4792	4792	2283	2283	2283
We observe that males are slightl gender and other variables in the J	ly more likely model is negli	than females t gible.	o have replied	to our emails.	However, LL	F and ROC-at	ic scores show	v that the addit	iional explanat	ory power of

 $p < 0.10, p < 0.05, p < 0.01^{\circ}$  g here stands for "according to the automated gender guesser"

Acknowledgements The authors thank all the survey participants for their time and efforts. Excellent research assistance was provided by Marta Duda, Aleksandra Nagańska, Michał Woźniak, and Jakub Reniec.

Author contributions HA: Data curation, Investigation, Methodology, Visualization, Writing—original draft, Writing—review & editing. MK: Conceptualization, Funding acquisition, Methodology, Project administration, Supervision, Writing—review & editing. MW: Data curation, Formal Analysis, Investigation, Methodology, Software, Visualization.

Funding This project was supported by Polish National Science Center Grant Number 2017/27/B/ HS4/00624 (MK).

Data availability Available upon request.

## Declarations

Competing interests The authors have no relevant financial or non-financial interests to disclose.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

# References

- Abramo, G., & D'Angelo, C. A. (2015). The relationship between the number of authors of a publication, its citations and the impact factor of the publishing journal: Evidence from Italy. *Journal of Informetrics*, 9(4), 746–761.
- Astorne-Figari, C., & Speer, J. D. (2018). Drop out, switch majors, or persist? The contrasting gender gaps. *Economics Letters*, 164, 82–85. https://doi.org/10.1016/j.econlet.2018.01.010
- Bansak, C. A., Graham, M. E., & Zebedee, A. A. (2011). The effects of gender composition of senior management on the economic fallout. *Applied Economics Letters*. https://doi.org/10.1080/13504 851.2011.554364
- Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *The Quarterly Journal of Economics*, 116(1), 261–292. https://doi.org/10.1162/00335 5301556400
- Beneito, P., Boscá, J. E., Ferri, J., & García, M. (2021). Gender imbalance across subfields in economics: When does it start? *Journal of Human Capital*, 15(3), 469–511.
- Bentley, P. J., & Kyvik, S. (2013). Individual differences in faculty research time allocations across 13 countries. *Research in Higher Education*. https://doi.org/10.1007/s11162-012-9273-4
- Berger, A. N., Kick, T., & Schaeck, K. (2014). Executive board composition and bank risk taking. Journal of Corporate Finance, 28, 48–65. https://doi.org/10.1016/j.jcorpfin.2013.11.006
- Bettinger, E., & Slonim, R. (2007). Patience among children. Journal of Public Economics. https://doi. org/10.1016/j.jpubeco.2006.05.010
- Björk, B.-C. (2017). Open access to scientific articles: A review of benefits and challenges. Internal and Emergency Medicine, 12(2), 247–253. https://doi.org/10.1007/s11739-017-1603-2
- Björk, B.-C., & Öörni, A. (2009). A method for comparing scholarly journals as service providers to authors. Serials Review, 35(2), 62–69. https://doi.org/10.1016/j.serrev.2009.03.001
- Blau, F. D., Currie, J. M., Croson, R. T., & Ginther, D. K. (2010). Can mentoring help female assistant professors? Interim results from a randomized trial. *American Economic Review*, 100(2), 348–352.
- Bogan, V. L., Just, D. R., & Dev, C. S. (2013). Team gender diversity and investment decision-making behavior. *Review of Behavioral Finance*, 5(2), 134–152. https://doi.org/10.1108/RBF-04-2012-0003

- Born, A., Ranehill, E., & Sandberg, A. (2020). Gender and willingness to lead: Does the gender composition of teams matter? *The Review of Economics and Statistics*. https://doi.org/10.1162/rest\_a\_ 00955
- Bornmann, L. (2012). The Hawthorne effect in journal peer review. Scientometrics, 91(3), 857-862.
- Bröchner, J., & Björk, B.-C. (2008). Where to submit? Journal choice by construction management authors. Construction Management and Economics. https://doi.org/10.1080/01446190802017698
- Buser, T. (2016). How does the gender difference in willingness to compete evolve with experience? SSRN Electronic Journal. https://doi.org/10.2139/ssrn.2747342
- Buser, T., & Yuan, H. (2019). Do women give up competing more easily? Evidence from the lab and the Dutch Math Olympiad. American Economic Journal: Applied Economics. https://doi.org/10.1257/app. 20170160
- Castillo, M., Ferraro, P. J., Jordan, J. L., & Petrie, R. (2011). The today and tomorrow of kids: Time preferences and educational outcomes of children. *Journal of Public Economics*. https://doi.org/10.1016/j.jpubeco.2011.07.009
- Castillo, M., Leo, G., & Petrie, R. (2020). Room composition effects on risk taking by gender. *Experimental Economics*. https://doi.org/10.1007/s10683-019-09635-w
- Ceci, S. J., Ginther, D. K., Kahn, S., & Williams, W. M. (2014). Women in academic science: A changing landscape. *Psychological Science in the Public Interest, Supplement*. https://doi.org/10.1177/15291 00614541236
- Charness, G., & Gneezy, U. (2012). Strong evidence for gender differences in risk taking. Journal of Economic Behavior and Organization. https://doi.org/10.1016/j.jebo.2011.06.007
- Crack, T. F., Grieves, R., & Lown, M. G. (2011). Put your best foot forward: A pre-submission checklist for journal articles. Working Paper
- Croson, R., & Gneezy, U. (2009). Gender differences in preferences. Journal of Economic Literature, 47(2), 448–474. https://doi.org/10.1257/jel.47.2.448
- Dalton, M. (2013). A dissemination divide? The factors that influence the journal selection decision of Library & Information Studies (LIS) researchers and practitioners. *Library and Information Research*, 37(115), 33–57.
- Deaves, R., Lüders, E., & Schröder, M. (2010). The dynamics of overconfidence: Evidence from stock market forecasters. *Journal of Economic Behavior and Organization*. https://doi.org/10.1016/j.jebo.2010. 05.001
- Dittrich, M., & Leipold, K. (2014). Gender differences in time preferences. *Economics Letters*. https:// doi.org/10.1016/j.econlet.2014.01.002
- Djupe, P. A., Smith, A. E., & Sokhey, A. E. (2019). Explaining gender in the journals: How submission practices affect publication patterns in political science. *PS Political Science and Politics*. https:// doi.org/10.1017/S104909651800104X
- Drupp, M. A., Khadjavi, M., Riekhof, M. C., & Voss, R. (2020). Professional identity and the gender gap in risk-taking. Evidence from field experiments with scientists. *Journal of Economic Behavior* and Organization. https://doi.org/10.1016/j.jebo.2019.12.020
- Elsaid, E., & Ursel, N. D. (2011). CEO succession, gender and risk taking. *Gender in Management*. https://doi.org/10.1108/17542411111175478
- Fang, F. C., & Casadevall, A. (2011). Retracted science and the retraction index. Infection and Immunity, 79(10), 3855–3859. https://doi.org/10.1128/IAI.05661-11
- Filippin, A., & Crosetto, P. (2016). A reconsideration of gender differences in risk attitudes. Management Science. https://doi.org/10.1287/mnsc.2015.2294
- Frandsen, T. F. (2019). Why do researchers decide to publish in questionable journals? A review of the literature. *Learned Publishing*. https://doi.org/10.1002/leap.1214
- Fry, J., Dis, C. O., Creaser, C., Johnson, W., Summers, M., Lisu, S. W., Butters, G., Craven, J., Griffiths, J., Cerlim, D. H., & JISC. (2009). Communicating knowledge: How and why UK researchers publish and disseminate their findings. In *Report*
- Ghiasi, G., Lariviere, V., & Sugimoto, C. R. (2016). Gender differences in synchronous and diachronous self-citations. 21St International Conference on Science and Technology Indicators (Sti 2016), September
- Golsteyn, B. H. H., Grönqvist, H., & Lindahl, L. (2014). Adolescent time preferences predict lifetime outcomes. *Economic Journal*. https://doi.org/10.1111/ecoj.12095
- Gordon, M. D. (1984). How Authors Select Journals: A test of the reward maximization model of submission behaviour. Social Studies of Science. https://doi.org/10.1177/030631284014001003
- Gravert, C. A., & Sørensen, K. T. (2020). Gender differences in submission strategies? A survey of early-career economists. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3665951

- 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*. https://doi.org/10.1007/s11162-017-9454-2
- Hardies, K., Breesch, D., & Branson, J. (2013). Gender differences in overconfidence and risk taking: Do self-selection and socialization matter? *Economics Letters*. https://doi.org/10.1016/j.econlet. 2012.12.004
- Healy, A., & Pate, J. (2011). Can teams help to close the gender competition gap? *Economic Journal*. https://doi.org/10.1111/j.1468-0297.2010.02409.x
- Heckman, J. J., & Moktan, S. (2020). Publishing and promotion in economics: The tyranny of the top five. *Journal of Economic Literature*, 58(2), 419–470.
- Heintzelman, M., & Nocetti, D. (2009). Where should we submit our manuscript? An analysis of journal submission strategies. *The B.e. Journal of Economic Analysis & Policy*. https://doi.org/10.2202/ 1935-1682.2340
- Holman, L., Stuart-Fox, D., & Hauser, C. E. (2018). The gender gap in science: How long until women are equally represented? *PLoS Biology*, 16(4), e2004956.
- Huang, J., Gates, A. J., Sinatra, R., & Barabási, A. L. (2020). Historical comparison of gender inequality in scientific careers across countries and disciplines. *Proceedings of the National Academy of Sciences*, 117(9), 4609–4616.
- Jappelli, T., Nappi, C. A., & Torrini, R. (2017). Gender effects in research evaluation. *Research Policy*, 46(5), 911–924.
- Jolly, S., Griffith, K. A., DeCastro, R., Stewart, A., Ubel, P., & Jagsi, R. (2014). Gender differences in time spent on parenting and domestic responsibilities by high-achieving young physician-researchers. Annals of Internal Medicine. https://doi.org/10.7326/m13-0974
- Kiai, A. (2019). To protect credibility in science, banish "publish or perish." Nature Human Behaviour, 3(10), 1017–1018.
- La Rocca, M., Neha, N., & La Rocca, T. (2020). Female management, overconfidence and debt maturity: European evidence. *Journal of Management and Governance*, 24(3), 713–747.
- Larivière, V., Ni, C., Gingras, Y., Cronin, B., & Sugimoto, C. R. (2013). Bibliometrics: Global gender disparities in science. *Nature*, 504(7479), 211–213.
- Lee, J., Yang, K., & Oh, D. G. (2020). Factors influencing the choice of a publication venue in library and information science. *Learned Publishing*. https://doi.org/10.1002/leap.1300
- Lee, S.-H. (2009). A theory of self-selection in a market with matching frictions: An application to delay in refereeing times in economics journals. *Journal of Economic Behavior & Organization*, 72(1), 344– 360. https://doi.org/10.1016/j.jebo.2009.05.027
- Lusk, J. L., & Hudson, M. D. (2009). Submission patterns, submission policies, and revealed preferences for agricultural economics journals. *Review of Agricultural Economics*, 31(4), 695–711. https://doi.org/10. 1111/j.1467-9353.2009.01462.x
- Luukkonen, T. (1992). Is scientists' publishing behaviour rewardseeking? Scientometrics, 24(2), 297–319. https://doi.org/10.1007/BF02017913
- Madison, G., & Fahlman, P. (2021). Sex differences in the number of scientific publications and citations when attaining the rank of professor in Sweden. *Studies in Higher Education*, 46(12), 2506–2527.
- Mandel, H., Lazarus, A., & Shaby, M. (2020). Economic exchange or gender identities? Housework division and wives' economic dependency in different contexts. *European Sociological Review*, 36(6), 831– 851. https://doi.org/10.1093/esr/jcaa023
- Mauleón, E., Hillán, L., Moreno, L., Gómez, I., & Bordons, M. (2013). Assessing gender balance among journal authors and editorial board members. *Scientometrics*, 95(1), 87–114.
- Mayer, S. J., & Rathmann, J. M. (2018). How does research productivity relate to gender? Analyzing gender differences for multiple publication dimensions. *Scientometrics*, 117(3), 1663–1693.
- Muller-Itten, M. (2017). Gatekeeping under asymmetric information. SSRN Electronic Journal. https://doi. org/10.2139/ssrn.3708486
- Nekby, L., Thoursie, P. S., & Vahtrik, L. (2008). Gender and self-selection into a competitive environment: Are women more overconfident than men? *Economics Letters*. https://doi.org/10.1016/j.econlet.2008. 03.005
- Oster, S. (1980). The optimal order for submitting manuscripts. American Economic Review, 70(3), 444-448.
- Pepermans, G., & Rousseau, S. (2016). The decision to submit to a journal: Another example of a valenceconsistent Shift? *Journal of the Association for Information Science and Technology*. https://doi.org/ 10.1002/asi.23491
- Śpiewanowski, P., & Talavera, O. (2021). Journal rankings and publication strategy. Scientometrics, 126(4), 3227–3242.

- Teele, D., & Thelen, K. (2017). Gender in the journals: Publication patterns in political science. PS: Political Science & Politics, 50(2), 433–447. https://doi.org/10.1017/S1049096516002985
- Thöni, C., & Volk, S. (2021). Converging evidence for greater male variability in time, risk, and social preferences. Proceedings of the National Academy of Sciences, 118(23), e2026112118.
- Unutmaz Durmuşoğlu, Z. D., & Durmuşoğlu, A. (2021). A TOPSIS model for understanding the authors choice of journal selection. *Scientometrics*, 126(1), 521–543.
- van Dalen, H. P. (2021). How the publish-or-perish principle divides a science: The case of economists. Scientometrics, 126(2), 1675–1694.
- Weisshaar, K. (2017). Publish and perish? An assessment of gender gaps in promotion to tenure in academia. Social Forces, 96(2), 529–560.
- Wijewickrema, M., & Petras, V. (2017). Journal selection criteria in an open access environment: A comparison between the medicine and social sciences. *Learned Publishing*, 30(4), 289–300. https://doi. org/10.1002/leap.1113

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.