

Explaining Gender in the Journals:  
How Submission Practices Affect Publication Patterns in Political Science<sup>1</sup>

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In a recent study, Teele and Thelen (2017) carefully document what amounts to the substantial underrepresentation of female-authored scholarship in a broad selection of political science journals. To better understand what might be driving their reported patterns, we present the results of an original, individual-level survey of political scientists conducted in the spring of 2017. Confirming Teele and Thelen’s speculation concerning what might underlie the gender gap in publication, our evidence points to differences in submission rates – a pattern that appears to be particularly pronounced for the “Top Three” journals in the discipline. Leveraging original survey items, we pursue additional explanations for this submission dynamic, finding that both methodological specialization and risk aversion may play roles. Importantly, we also conclude that men and women get differential returns on their investments in co-authorship: while male and female respondents report identical propensities to coauthor, co-authorship appears to boost submission and publication rates much more strongly for men than women. We discuss the implications of our findings for ongoing conversations about inequality in political science.

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## Introduction and Background

Teele and Thelen's (2017) recent study on the gender gap in publication joins a vibrant and growing discussion over gender-based inequalities in political science and academe more generally. Looking at 15 years of publication data for 10 major journals in the discipline, they find that women are underrepresented relative to their numbers in the discipline, that they are not benefitting equally with men from an increased tendency to co-author, and that they may be disadvantaged by the dominance of quantitative work.

Teele and Thelen pose two potential explanations for the gaps they document: rejection rates might be higher for women than for men; or women might submit work at lower rates than men (2017:442). They note that they cannot adjudicate between these possibilities with their data. However, in citing several published analyses of submission data (e.g., Breuning and Sanders 2007; Østby et al. 2013<sup>2</sup>), they speculate that the gap cannot be explained by higher rejection rates for women (2017: 442-43) – something that jells with recent journal audits (e.g., *Political Behavior*), which have reported little evidence that the work of female scholars is rejected at higher rates than that of their male counterparts.

In this note we pick up where Teele and Thelen's important analysis leaves off. To better understand what might be driving the gender gap in publication, we draw on data from an original, individual-level survey of political scientists conducted in the spring of 2017. Supporting Teele and Thelen's (2017) suspicions, we do find gender differences in submission rates at the same journals they studied; the pattern is particularly pronounced for the "Top Three" journals in the discipline (i.e., the *APSR*, *APJS*, and *JOP*). Our results point to methodological specialization (namely, quantitative-statistical scholarship) and risk aversion as potential explanations for the gender gap in submissions. Critically, we also find that men and women appear to get differential returns on their investments in co-authorship: male and female respondents report similar propensities for collaboration, but such activity appears to boost submission and publication rates much more strongly for men than women.

In the sections that follow, we briefly describe the parameters of the original study. Turning to the data, we then begin by contextualizing Teele and Thelen's (2017) analysis of articles – we consider a variety of submission types/activities, including books and grants. Upon finding that gender gaps in submission practices appear to be largely concentrated in articles, we focus on submissions to the journals highlighted by Teele and Thelen (2017), looking for distinctions by gender and rank. In the penultimate section we leverage our original survey items to evaluate potential explanations for gendered submission dynamics – these include methodological differences, strategy/orientations towards risk, and co-authorship. We close by discussing the implications of our findings for ongoing conversations about inequality in political science, and the steps, policies, and practices for addressing these problems.

## Data: The PASS Study

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<sup>2</sup> Breuning and Sanders (2007) examine CPS, ISQ and World Politics; Østby et al. (2013) the *Journal of Peace Research*.

Our data come from the Professional Activity in the Social Sciences (PASS) study, a survey conducted by the authors in March, 2017. In early 2017 we sampled half of APSA member departments (N=308),<sup>3</sup> and then generated a list of faculty in these departments (N=5,084).<sup>4</sup> A solicitation with a survey link was sent by email to all faculty in these sampled departments; after 3 reminders, 900 political scientists completed the internet survey for a final response rate of just under 18%.

Demographic comparisons between the PASS study, two recent surveys of political scientists, and numbers reported by the American Political Science Association appear in Table A1 of the appendix. It is worth noting that the sample is about 10 percent more female than the other data sets (e.g., Mitchell and Hesli's 2013 study), but is otherwise comparable in terms of rank, race, subfields, and percentages from PhD granting institutions.

In the survey we asked respondents a variety of questions about their professional behavior over the past year. In addition to collecting self-reported information on submissions and publications, we also asked about advice networks, work-life balance, reviewing behavior, and attitudes toward the publication process more generally.

### **Gender, Submissions, and Publications: A First Look**

Our PASS survey queried respondents for submission and publication information on not just articles; we also asked about activity related to books, book reviews, internal and external grants, and blogging. In Figure 1 we present respondents' reports on the number of submissions in the past year broken out by gender and type of work. As we might expect, book manuscripts have the lowest number of submissions and articles the highest, with other types of works falling somewhere in-between. Interestingly, while we see a slightly higher mean number of submissions for men when we sum responses across the categories, the gender differences only emerge as statistically significant for blog posts and articles. The latter gender gap in journal article submissions is, of course, especially important for our purposes.

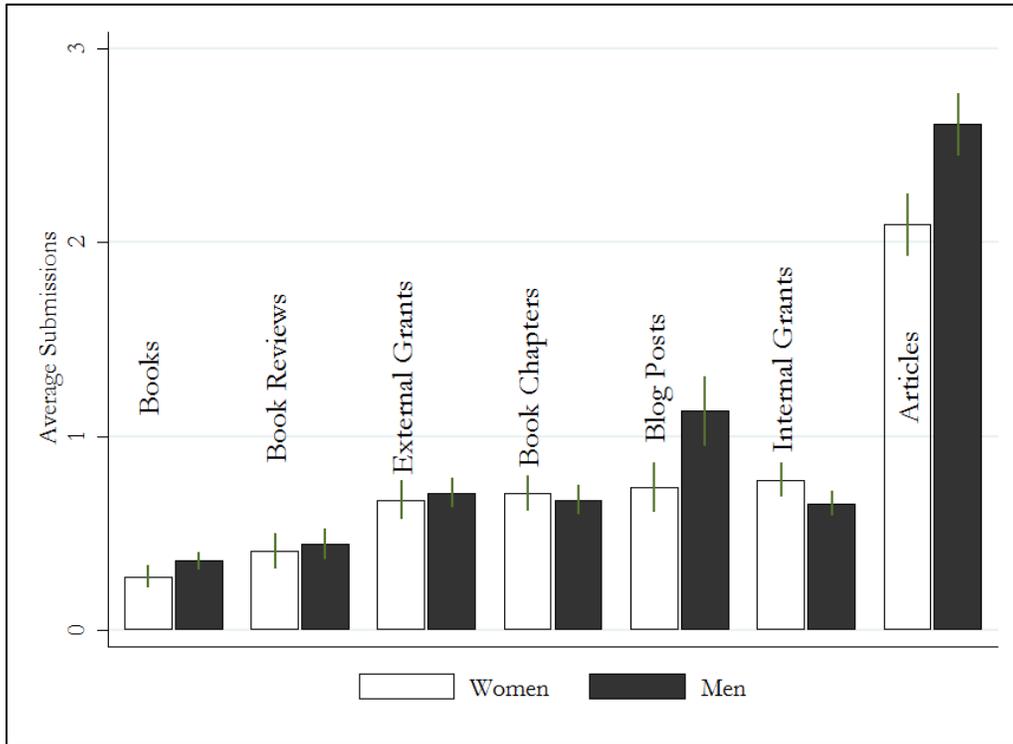
Figure 2 shifts the focus to publication rates, considering whether there is once more something unique about journal activity, relative to other kinds of professional output. A quick glance at the figure suggests that there is: while male respondents again record higher numbers across several publication types, differences between men and women are only statistically significant in the case of journals. Indeed, while we see hints of a broad gendered pattern of publication, the gap in submissions and publications appears to be concentrated in what is arguably the dominant currency of the discipline: journal articles.

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<sup>3</sup> In June, 2017 we conducted a companion study of sociology departments (at the same sampled universities). We discuss those results [elsewhere](#).

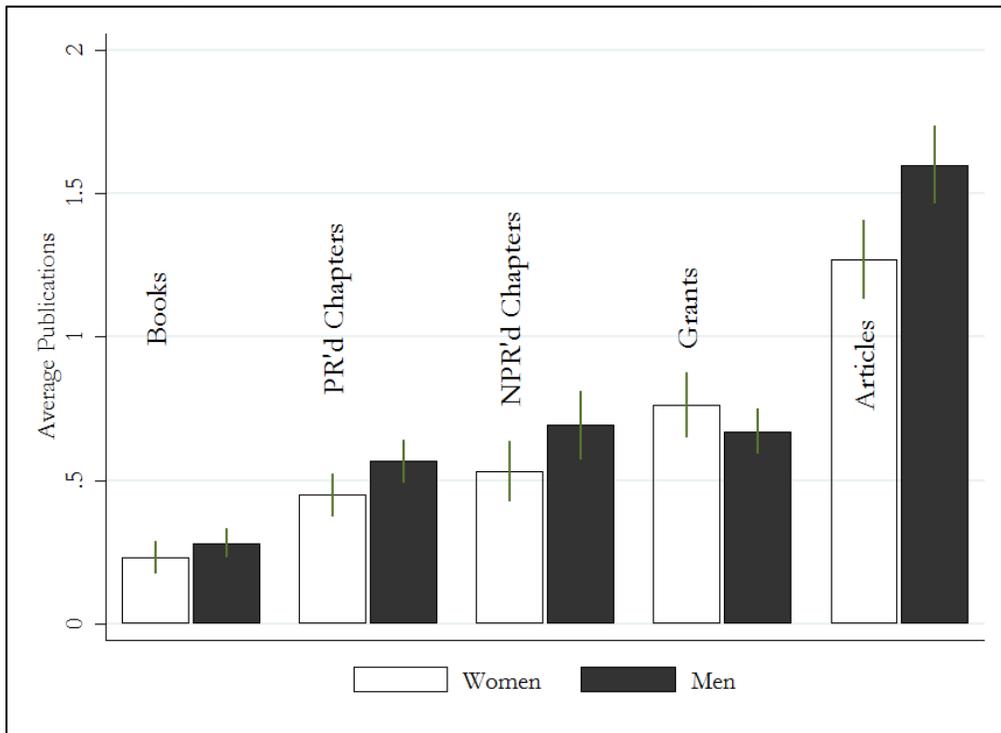
<sup>4</sup> We had coders collect email addresses from the web-pages for these departments. 44 email addresses were not usable.

Figure 1: Submissions in the Past Year, by Gender



Source: Professional Activity in the Social Sciences (PASS) Survey (Djupe, Smith and Sokhey 2017)

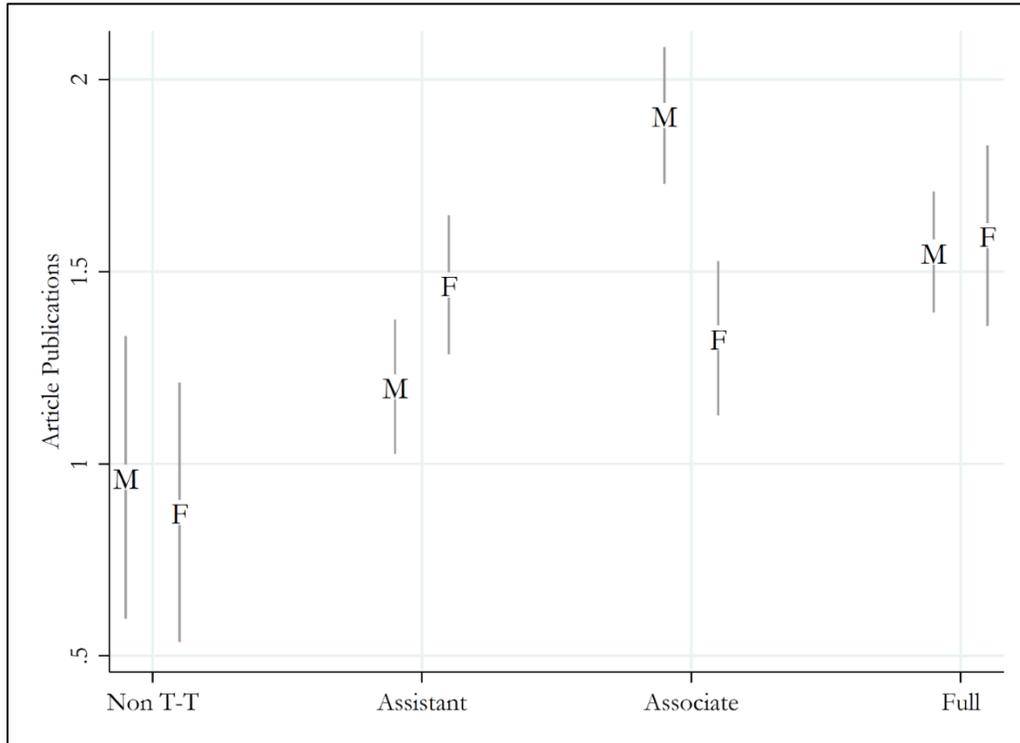
Figure 2: Average Publications in the Past Year, by Gender



Source: Professional Activity in the Social Sciences (PASS) Survey (Djupe, Smith and Sokhey 2017)

In Figure 3 we focus in on this difference in journal articles as a preview of analyses to come, breaking things out by rank and gender. We immediately see that rank should be taken into consideration in any subsequent examination of gendered publication dynamics, as the gap in article production in our data appears to be driven by male Associate professors. We now turn our attention to the ways in which gender and rank are linked to journal submission practices.

Figure 3: Articles Published in the Last Year by Gender and Rank



Source: Professional Activity in the Social Sciences (PASS) Survey (Djupe, Smith and Sokhey 2017)

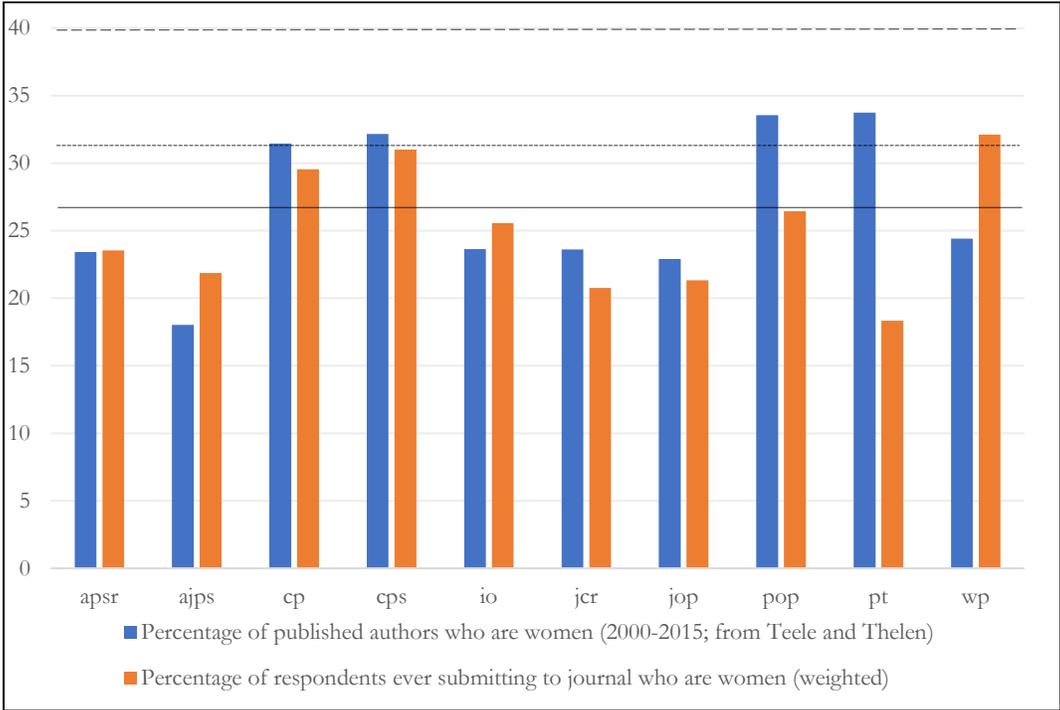
### Submissions to Journals Included in Teele and Thelen’s (2017) Analysis

A first cut at our data confirms previous accounts of gender gaps, while also providing additional perspective that narrows our focus: journal articles seem uniquely affected. Teele and Thelen (2017) identify publication disparities in an analysis of 10 major journals over a 15 year period.<sup>5</sup> For six journals – including all “Top-Three” outlets (i.e., *APSR*, *AJPS*, *JOP*) – women are underrepresented relative to their numbers in top 20 Ph.D. departments or their share of APSA membership (see their Figure 3, pg. 436). Do we see similar disparities in *submission* practices for these same journals?

In Figure 4 we graph the percentage female among respondents reporting having submitted to the same 10 journals analyzed in Teele and Thelen (2017). For the sake of comparison, we report Teele and Thelen’s percentages of published authors who are women (blue bars) next to our numbers. We also place markers for the share of women in the discipline (horizontal lines; see figure notes).

<sup>5</sup> Teele and Thelen’s ten journals: *APSR*, *AJPS*, *Comparative Politics*, *Comparative Political Studies*, *International Organization*, *Journal of Conflict Resolution*, *JOP*, *Perspectives on Politics*, *Political Theory*, *World Politics*.

Figure 4: The Percentage of Submissions and Publications by Women in Journals Analyzed by Teele and Thelen (2017)\*



Source: Professional Activity in the Social Sciences (PASS) Survey (Djupe, Smith and Sokhey 2017)

\* The horizontal lines mark the share of women in the discipline, as reported by Teele and Thelen (2017: 436). The solid line marks the share of women in tenure-track positions in the top 20 Ph.D. granting departments (27%); the tight-dashed line the portion of women among APSA members (31%); the large-dash line the share of women among new Ph.Ds (40%), per NSF’s survey of earned doctorates.

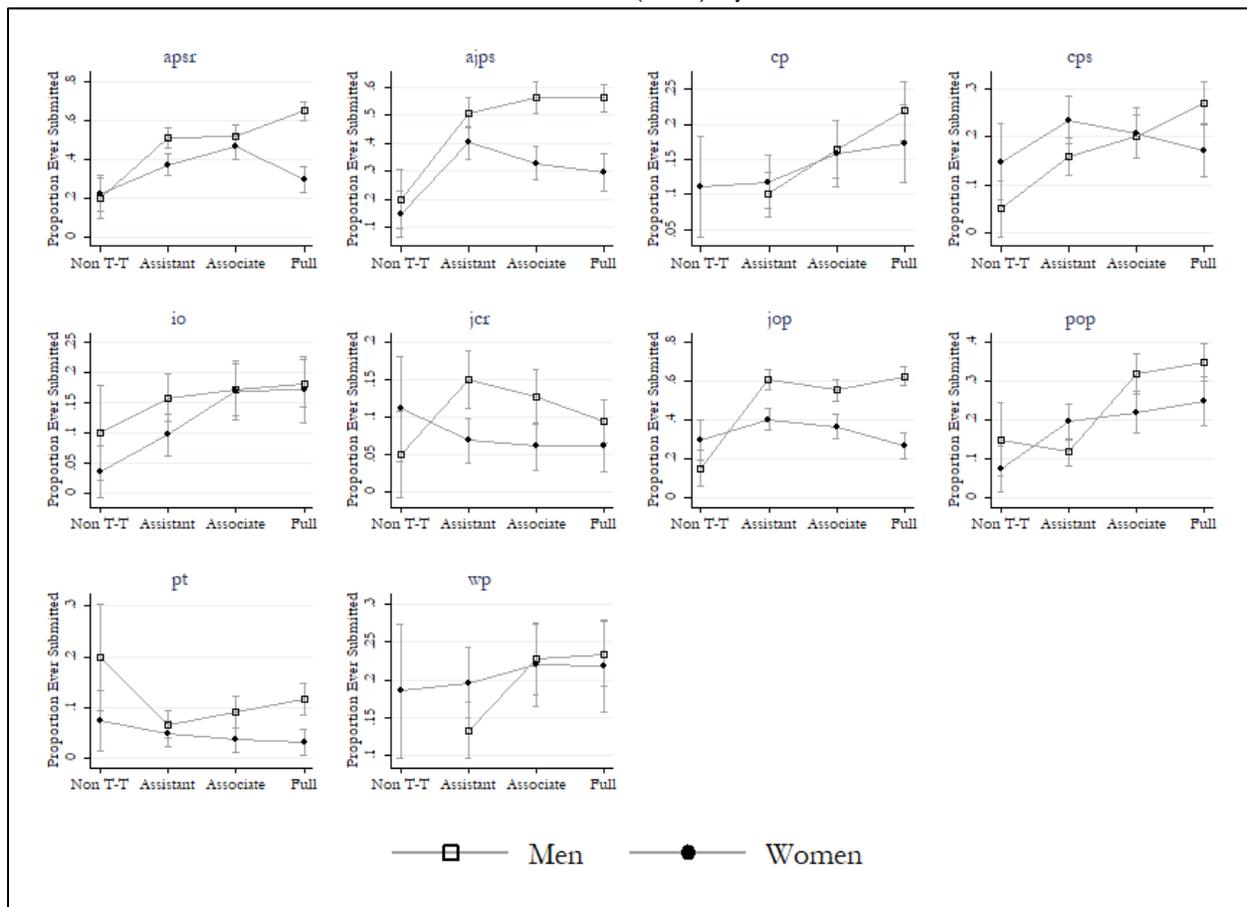
A glance at the bars reveals that within each journal, women scholars’ submission and publication rates correspond closely. In a few cases, the percentage reporting submitting to a journal outpaces the percentage of published authors who are female (e.g., *World Politics*), and in a few cases this pattern is reversed (e.g., *Political Theory*; *Perspectives on Politics*). However, for the most part the two bars track closely together. This suggests that – to modify a common expression used to describe female political candidates – when women submit journal articles, they “win,” at least at rates comparable to those of men. That is, there is no evidence that women’s work is rejected more frequently than is men’s work.<sup>6</sup>

<sup>6</sup> This does not address the possibility of gender bias in evaluation of women’s and men’s work, since women and men are known to produce different kinds of work (e.g., they tend to use different methods and address different research questions), and there could be unmeasured heterogeneity in the quality of women’s and men’s work (e.g., women might submit higher quality work but face equal acceptance rates as men). Evaluating whether bias occurs in the review process would require experimental studies holding constant the content of (hypothetical) submitted work, while varying the gender identity of the author.

In most cases the percentage of those reporting ever submitting to each journal who are female falls below the share of women in the discipline (regardless of the measure of that percentage). All three of the discipline’s top “general interest” journals fall in the bottom half using our numbers on submission: less than 25% of our respondents who report submitting to the *APSR*, *AJPS* or *JOP* are female. On its face, this would seem to add confirmation to Teele and Thelen’s (2017) speculation that the publication gap is driven by a submission gap.

Figure 5 further scrutinizes submission patterns for these journals, plotting the proportion of respondents reporting ever submitting by gender and rank. Looking across the tiles, several noteworthy patterns emerge. First – as we might expect – submission rates are generally lower for non tenure-track faculty than tenure-track faculty. Second, for most of these journals, the rates of submission are higher, across most ranks, for men (squares) than women (circles). To be clear, these differences are not always statistically significant, but men’s reported rates generally track above women’s. Third, for the discipline’s consensus top-tier journals (i.e., the *APSR*, *AJPS* and *JOP*), this gendered pattern both obtains and is statistically significant across most ranks.

Figure 5: Percent Male & Female Political Scientists Having Submitted to the Journals Analyzed in Teele & Thelen (2017) by Rank

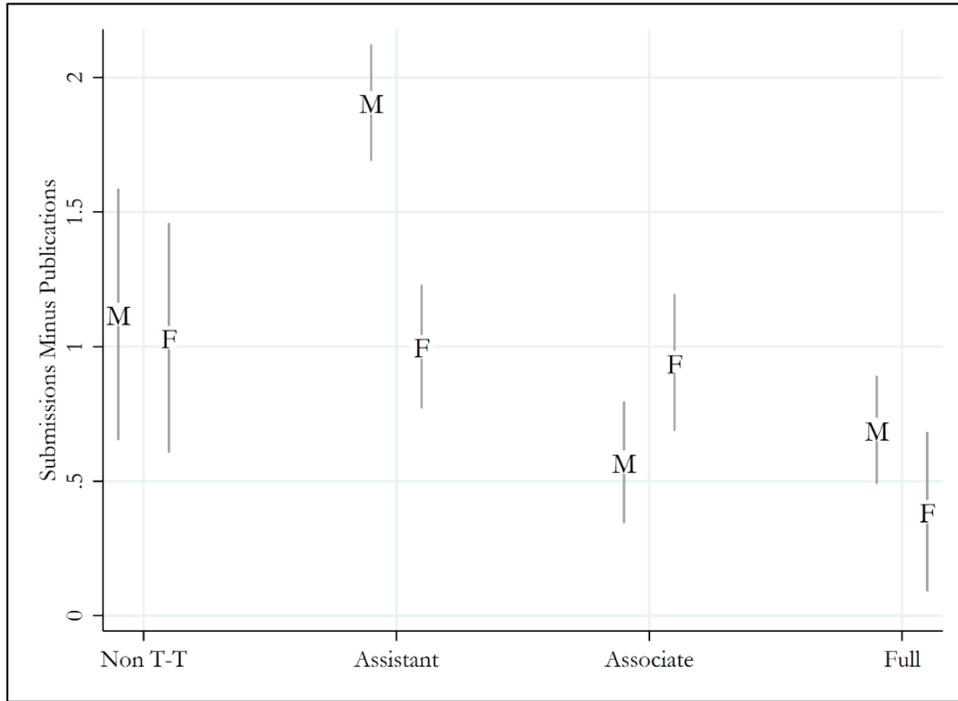


Source: Professional Activity in the Social Sciences (PASS) Survey (Djupe, Smith and Sokhey 2017)

What picture emerges when we reconcile these gendered submission patterns with the pattern of publication rates? In Figure 6 we graph the difference between submissions and publications by rank

and gender; higher positive numbers signal more submissions per publication – i.e., a higher rejection rate. The plot unambiguously shows male assistant professors “flooding” the review process with submissions and receiving higher numbers of rejections relative to their female counterparts. Note, too, that the rejection rate declines across rank, though that rate is much more stable across rank among women.

Figure 6: Journal Acceptances (versus Submissions) by Gender and Rank

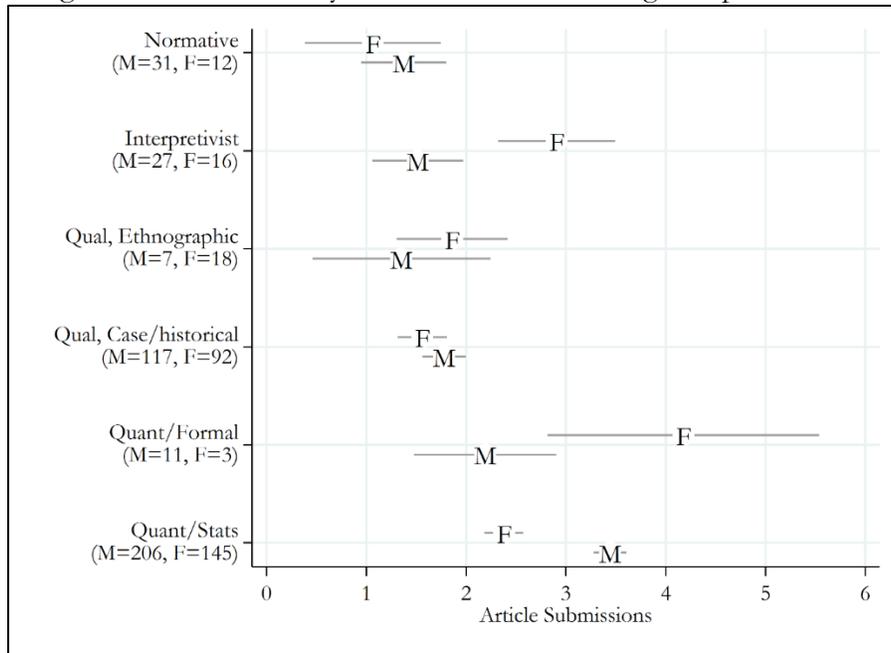


Source: Professional Activity in the Social Sciences (PASS) Survey (Djupe, Smith and Sokhey 2017)

### Are Methods Driving these Patterns?

Can gender differences in submissions and publications be traced to the types of work women and men do, as Teele and Thelen (2017) suggest? Figure 7, which plots submission rates by respondents’ self-described methodological specializations, suggests that methods are certainly part of the story. Men’s and women’s article submission rates are comparable in most methodological camps: between 1 and 2 articles a year. Only a couple of significant gender differences emerge within categories. Most critically, among scholars reporting that they primarily do quantitative/statistical work, the difference is about 1 submission per year. While we see significant gender gaps in the other direction among interpretivists (and a near significant difference for formal modelers), the size of the quantitative/statistical category, which contains the plurality (40%) of respondents, dwarfs all other specializations (respondent numbers are reported under the labels in the table).

Figure 7: Submissions by Gender and Methodological Specialization



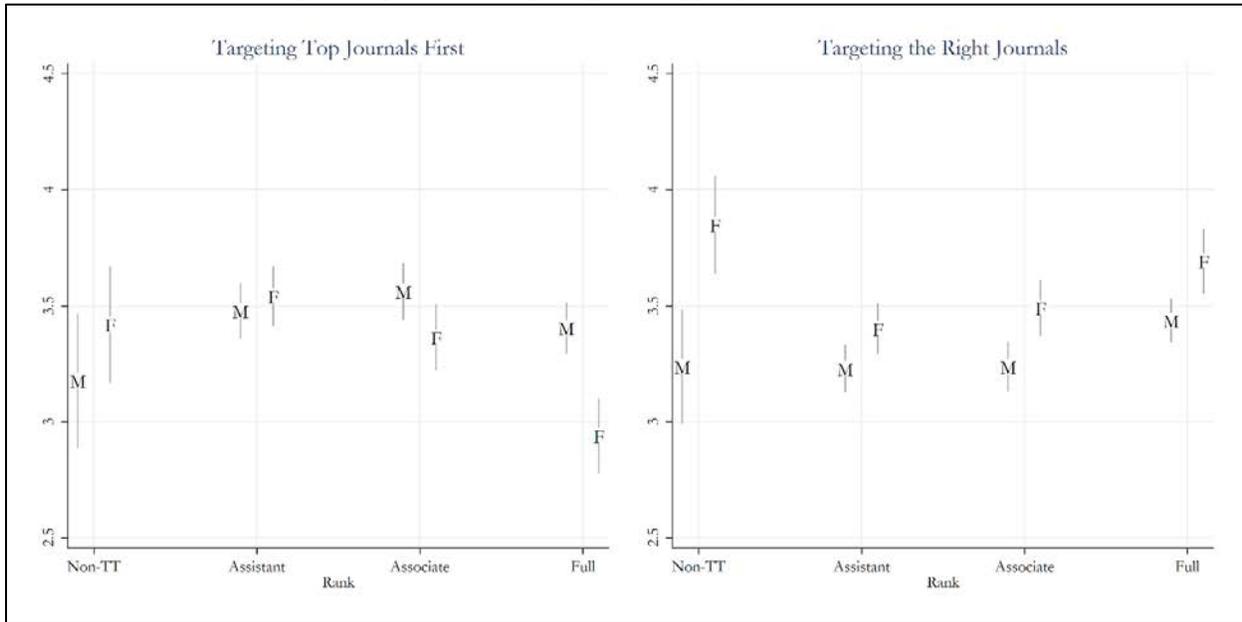
Source: Professional Activity in the Social Sciences (PASS) Survey (Djupe, Smith and Sokhey 2017)

### Is It About Strategy or Risk Management?

While methods certainly play a role, we suspect that gender differences in strategy and management of risk also help explain the observed patterns. Are women aiming for lower-tiered journals as a strategy, expecting a greater chance of success at such journals? In our survey we asked respondents a Likert-style battery of questions about their approaches to the publication process. Two statements – “I try to send my work to the journal that is most likely to accept it,” and “I submit my work to the discipline's top journals first” –capture two sides of the same coin.

Figure 8 splits the results by sex and rank, with consistent and revealing results. At all ranks, women express higher agreement than men that they send their work to journals most likely to accept it; this difference is statistically significant at both the Associate and Full levels. Conversely, tenured women are *less* likely than men to report sending their work the top-tier journals first – a difference that is significant at the full level. If the institution of tenure is supposed to inspire high-risk, high-reward publication strategies, it would not seem to have uniform effects on male and female political scientists. Put differently, these results suggest that tenured men are more risk acceptant in their pursuit of publication.

Figure 8: Journal Targeting Strategy, by Gender and Rank



Source: Professional Activity in the Social Sciences (PASS) Survey (Djupe, Smith and Sokhey 2017)

### Does Co-authorship Help?

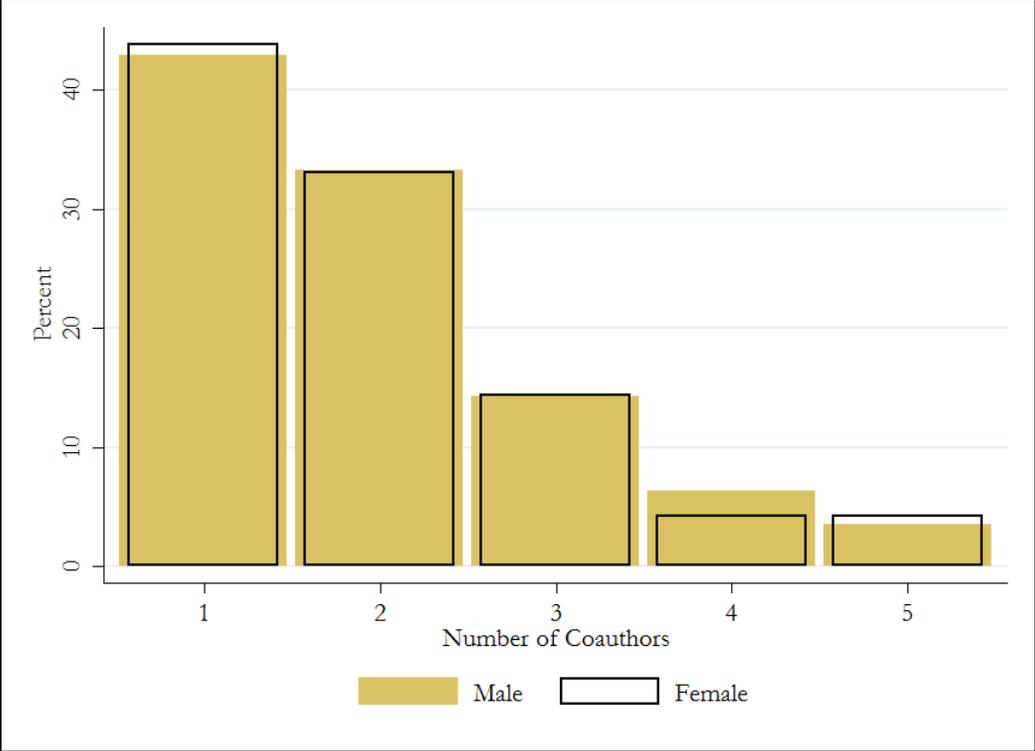
Last but not least, we consider the effects of co-authorship. As the discipline of political science has become more accepting of collaborative work, do we see differences by gender? Do female political scientists report co-authoring at similar rates to men, and do such projects help them produce additional submissions and publications that might close gaps?

Figure 9 presents the percentage of respondents reporting varying number of co-authors on their most recent journal article submission; gold shaded bars represent male respondents and unshaded bars represent female respondents. Two things emerge as noteworthy: first, co-authorship is common in our sample, in-line with other reports of disciplinary trends. Second, the close overlap in the bars suggests that men and women co-author at rates that are indistinguishable (57% of men and 56% of women coauthored their most recent paper,  $p=.80$ ).

If men and women co-author at similar rates, do they benefit equally? In Figure 10, we visualize the results of regression models predicting submissions (Panel A) and publications (Panel B) as a function of gender and the propensity to co-author. Propensity to coauthor is created by combining answers to Likert items on collaboration and information respondents reported on their professional networks (details are available in the appendix, along with the full model estimates).

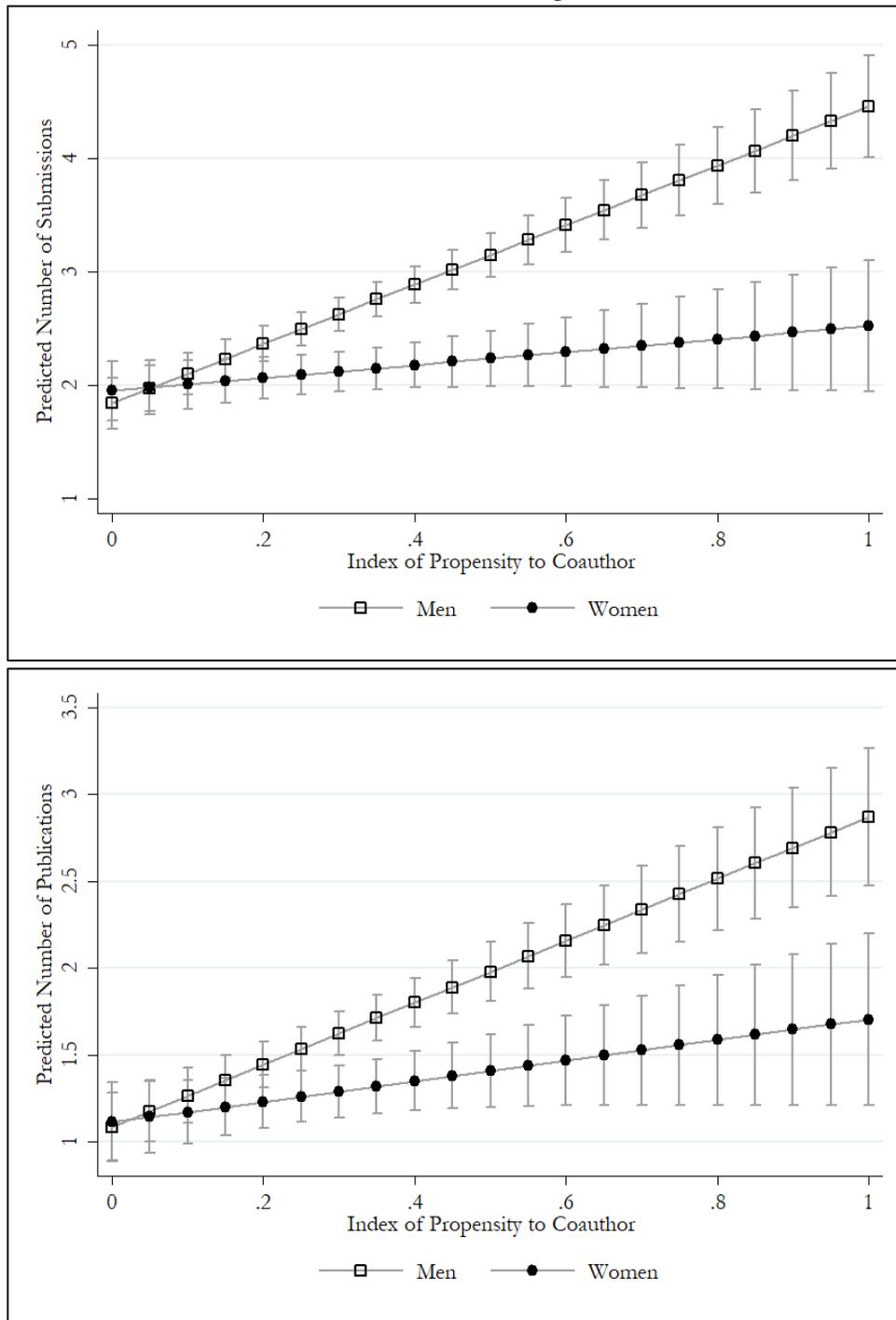
We see that while co-authorship boosts submissions and publications for all respondents, men benefit considerably more than do women from working with others. Across the range of the co-authorship item, the predicted number of submissions remains stagnant for women; it slopes slightly upwards for publications. For men, the increase in submissions and publications is dramatic: male political scientists most predisposed to co-author are predicted to acquire roughly 2 more submissions and 2 more publications versus those least likely to do so.

Figure 9: Number of Co-Authors on Most Recent Journal Submission, by Gender



Source: Professional Activity in the Social Sciences (PASS) Survey (Djupe, Smith and Sokhey 2017)

Figure 10: The Effects of Gender and Co-authorship on Submissions and Publications



Source: Professional Activity in the Social Sciences (PASS) Survey (Djupe, Smith and Sokhey 2017)

### Discussion and Conclusion

Teele and Thelen’s (2017) analysis of publication gaps in journals represents an important piece of self-study for political scientists. We build on their effort in several ways. First, we not only confirm

the patterns they find in assembling journal publication data, but provide context for those differences, noting that they appear to be largely limited to journal articles submissions vs. other types of work in the discipline (e.g., books). Second, we address the call to examine what might be driving such publication differences, finding considerable evidence pointing towards a submission gap. Third, we evaluate a number of factors that may be driving these submission patterns, finding that quant/qual. differences likely play a role, along with risk-orientations towards the review process. Importantly, co-authorship appears to amplify rather than mitigate gender differences.

What are we to make of this constellation of results? Fully understanding the findings we have outlined requires further examination of the work processes of women and men. For instance, how do women and men decide when a solo-authored publication is ready for submission? How do women and men choose co-authors? How is labor distributed within mixed gender collaborative arrangements? In further examining these arrangements, care must be taken not to assume that the behavior of male political scientists is normative.

Nonetheless, tentative recommendations are in order. If the publication gap really is a function of submission differences (and not the peer-review process), then closing it should be as “easy” as facilitating more journal submissions by women. Of course – and as our analyses have demonstrated – there are a number of impediments blocking such a course of action. To the extent men and women who do quantitative-statistical work submit that work at different rates, hope would seem to lie in the continuing efforts to bring more women into methodological conversations in the discipline (e.g., *Visions in Methodology*). To the extent women seem to be “aiming low” with their work, encouraging them to submit their manuscripts to top journals – particularly following tenure – would seem to make sense. Such encouragement to “give it a shot” should also be paired with (continued) editorial efforts to produce faster review cycles, thereby making submission to top journals a less costly decision. Finally, to the extent that women do not receive the same return on their investments in co-authorship, it would seem that in addition to working to ensure that women are rewarded equally for shared work, that providing guidance on effective collaborative strategies might be a useful investment for graduate programs and other professional development initiatives.

**Table A1** – A Comparison of Sample Statistics from Three Recent Surveys of Political Scientists

	Djupe, Smith, Sokhey (2017)	Mitchell & Hesli (2009/2014)	Djupe (2015)	APSA Reported*
Women	41.7	32.0	31.7	33
Assistants	32.8	30.1	25.4	
Associates	28.7	27.3	32.7	19
Full	30.3	34.6	37.7	26
White	88.0	87.0	82.4	65
PhD year	2003	1991	1997	—
PhD granting	37.2	34.4	46.5	43.3
BA granting	35.0	40.7	30.4	
American	33.1	37.8	—	
Comparative	22.3	17.3	—	
Articles, past/per year	1.4	.71 <sup>^</sup>	.97 <sup>^</sup>	—

\*These figures are reported in Djupe (2015: 346).

<sup>^</sup> The Mitchell and Hesli data came from a list generated in 2009; the articles were averaged from a career total with a denominator of 2009 minus the year they received the PhD. The Djupe 2015 statistic comes from a three-year prior total divided by three.

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