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Advocacy campaigns and gender bias in media coverage of elections

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Abstract

An unresolved aspect of women's underrepresentation in politics is the media portrayal of female candidates. This paper studies how advocacy campaigns may affect potential bias, leveraging the 2019 Swiss federal elections, which were shaped by two nation-wide, cross-party campaigns advocating for gender equality. The empirical analysis compares the 2015 and 2019 election campaigns, relying on an original dataset of the mentions that all candidates (over 3,700 respectively 4,600) received in over 2.2 million news articles. The analysis produces three main results. First, although in both elections male candidates received more media attention than female candidates did, the gender gap was significantly smaller in 2019 than in 2015. Second, in both elections, male and female candidates tended to be mentioned in conjunction with gender-stereotypical topics. Third, the gender gap in media attention before and after a key women's rights event was similar to that between the corresponding periods in 2015. These findings suggest that the differences observed between 2015 and 2019 are linked to the political campaign at large rather than to a specific event, despite its historical dimensions. The results contribute to the understanding of how advocacy campaigns can change bias in media coverage and, methodologically, to measuring and understanding gendered media coverage of politics.

Keywords: Election campaigns; gender bias; media coverage; political communication

1. Introduction

Gender bias in the media coverage of election campaigns has been a significant concern both in the political science literature and for political advocacy organizations. Unequal media coverage of female candidates may contribute to persistent gender inequalities in politics. The portrayal of female candidates in the media is crucial both for women's decisions to run for office in the first place (Haraldsson and Wängnerud, 2018) and for their electoral prospects, as increased visibility enhances their chances of getting elected (van Aelst *et al.*, 2008; van Erkel *et al.*, 2020). However, the extent and nature of media bias remain contested (Van der Pas and Aaldering, 2020). Some scholars argue that gender biases in coverage have decreased or even disappeared with increasing gender equality over recent years (Smith, 1997; Jalalzai, 2006; Hayes and Lawless, 2015), while others highlight the persistence of bias (Van der Pas and Aaldering, 2020). Generally, bias has proven notoriously difficult to measure, and many studies continue to rely on (small) human-coded samples with limited generalizability.

To the extent that unequal coverage persists, reducing gender bias in media coverage of female candidates is an important goal within the broader effort to improve electoral opportunities and representation for women (Dowling and Miller, 2015; Brooks and Hayes, 2019; Foos and Gilardi,

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2020). Advocacy campaigns, which are coordinated efforts aimed at influencing politics through strategic communication and organized activities, can be a crucial tool in this endeavor. These campaigns can help increase women's political ambition, support the nomination of female candidates to prominent positions, and influence news coverage to spotlight these female candidates. Hence, campaigns focusing on equal representation may address the problem of unequal coverage at its root.

In this article, we focus on two main questions. First, does a female candidate receive more or less media attention compared to a male candidate, indicating a bias in the coverage of female candidates? Second, can advocacy campaigns influence this relationship between gender and media coverage? To address these questions empirically, our analysis leverages the 2019 Swiss federal election which came to be known as "the election of women", increasing the share of female MPs in Switzerland's lower house from 32 to 42 percent. Importantly, this electoral success of female candidates was perceived to be fueled by two cross-party events, the national "women's strike" in June, as well as a nation-wide campaign ("Helvetia ruft" / "Helvetia is calling") that supported the nomination of female candidates. This led not only to better positions of women on party lists, women also performed better than men in the actual election (Giger *et al.*, 2022). Therefore, the 2019 Swiss national elections offer an ideal context to study how advocacy campaigns can affect how female candidates were portrayed in the public debate, specifically in media coverage.

Our empirical analysis compares the 2015 and 2019 elections, utilizing an original dataset of mentions received by all candidates (over 3,700 in 2015 and over 4,600 in 2019) across a corpus of over 2.2 million news articles. First, we focus on media attention using individual candidates as the unit of analysis. Differences in the attention afforded to different candidates are important because frequently mentioned candidates gain visibility and have higher chances of getting elected (van Aelst et al., 2008; van Erkel et al., 2020). We analyze the predictors of attention given to individual candidates throughout the entire campaign periods of 2015 and 2019. Our findings indicate that women receive less media coverage; however, this effect is significantly reduced in 2019 when accounting for candidate characteristics. We interpret this as a reduction of bias in media reporting, even though media attention remains unequal due to the historical under-representation of female politicians. Second, we analyze differences in the type of coverage, specifically how the coverage of female candidates varies by policy field, again focusing on individual candidates as the unit of analysis. Our innovative approach involves using a machine learning classifier to identify article topics, enabling us to examine substantially more articles than previous studies. We find that differences in the content of coverage persist in 2019. Third, we compare media mentions of women before and after the national women's strike, the central event of the campaign for gender equality in 2019. Specifically, we investigate whether the differences between 2015 and 2019 coincide with the timing of the women's strike or reflect an improved environment for female candidates throughout the entire campaign. We use days as the unit of analysis, aggregating candidate mentions at this level, and compare the periods before and after the women's strike in 2019. Differences in the amount and type of coverage in 2015 serve as a baseline. Our findings indicate that coverage did not become more equal after the women's strike.

Our study contributes in multiple ways to the understanding of gendered media coverage in politics. First, we analyze the effect of a unique campaign for female representation, which may serve as an inspiration for similar campaigns in other countries if proven successful. Additionally, we discuss strategies to reduce gender bias in media coverage, a topic of both academic and practical importance. Second, we contribute to the wider literature on gender bias in media coverage by utilizing a large sample of newspapers and candidates and employing a machine learning classifier. This approach provides a more comprehensive measure of bias, enabling us to address several open questions in the literature, which we discuss in the next section.

2. Theoretical background and expectations

2.1 Gender differences in media coverage

We understand gender bias as differences in media coverage of female and male politicians, both in quantity (are female candidates less visible in news coverage?) and quality (are female candidates covered differently than male candidates?) (Van der Pas and Aaldering, 2020, 114). Specifically, we examine the coverage each candidate receives, regardless of the total coverage of female candidates, which can be influenced by the number of women running. Existing research offers varying conclusions about the extent and nature of such bias. Some studies suggest a reduction in bias regarding coverage over time (Smith, 1997; Jalalzai, 2006; Hayes and Lawless, 2015), while others highlight its persistence. A recent meta-study found no decreasing trend, citing a 3.6 percentage point gap in coverage (Van der Pas and Aaldering, 2020), with a larger gap in proportional systems (see also for Switzerland Rohrbach *et al.*, 2020).

Additionally, research points to bias in the tone and focus of coverage, even when differences in extent are not identified (Bystrom *et al.*, 2001; Kittilson and Fridkin, 2008). Female candidates are often covered more on social issues like gender equality, education, health, welfare, and the environment, while male candidates receive more coverage on economic and foreign policy issues (Kittilson and Fridkin, 2008, 383). These differences are linked to varying levels of prestige (Escobar-Lemmon and Taylor-Robinson, 2005) and may influence the electoral opportunities of female candidates.

As with extent of coverage, evidence on gender bias regarding issues is mixed (Van der Pas and Aaldering, 2020, 131). Early studies found female candidates received more coverage on stereotypically female topics, and vice versa for men (Kahn and Goldenberg, 1991). Some later studies confirmed these results (Kittilson and Fridkin, 2008; Bode and Hennings, 2012; Goodyear-Grant, 2013), while others reached different conclusions (Jalalzai, 2006; Hayes and Lawless, 2015). For instance, Jalalzai (2006) argues that the prominence of female- or male-stereotyped topics also determines the coverage of individual candidates.

While we focus on advocacy campaigns, our study contributes to the broader analysis of gender bias in coverage, which has proven difficult to measure. Many studies rely on small, human-coded samples (Gidengil and Everitt, 2003; Dan and Iorgoveanu, 2013; Dunaway et al., 2013; Bystrom and Dimitrova, 2014; Conroy et al., 2015; Hayes and Lawless, 2015; Fernandez-Garcia, 2016; Foster Shoaf and Parsons, 2016) with limited generalizability. Additionally, much of the literature concentrates on narrowly defined electoral periods (Aaldering and Pas, 2020; Van der Pas and Aaldering, 2020), although bias may be more pronounced outside of this time (Aaldering and Pas, 2020). We study election years, covering 10 months and variations across the campaign cycle. Lastly, gender bias is difficult to measure due to the overlap between gender and factors like partisanship, incumbency, and viability, which complicates the interpretation of lower female coverage. An election with a record number of women running (Giger et al., 2022) offers a unique chance to assess gender bias.

2.2 Campaigns for equal representation and candidate coverage

The link between more women running for office and gender bias in media remains unclear. A higher share of female candidates may boost visibility simply due to their numbers, but we focus on individual coverage: Does a female candidate receive more or less media attention than a male candidate? Is there a quantitative bias in the coverage of female candidates? Additionally, can advocacy campaigns influence this gender-coverage relationship?

Several ways advocacy campaigns might affect bias can be considered. One is through indirect effects, where such campaigns increase the number of female candidates, altering the campaign environment. This was seen in the case of the "Helvetia ruft" campaign, which aimed to raise the number of female candidates across all parties. The campaign recruited potential candidates, contacted party leaders, and offered consistent support and training to women during the

election. However, it remains unclear if more female candidates result in increased individual coverage. Early studies suggested women were newsworthy due to their rarity in politics (Kahn, 1994), and cross-sectional comparisons show a higher share of female candidates does not necessarily lead to more coverage for women (Lühiste and Banducci, 2016, 237). Instead, this may correlate with societal gender equality, often linked to more female candidates (Lühiste and Banducci, 2016, 245). Nonetheless, an increase in female candidates—an effect of campaigns—could lead to more equal coverage as female candidates are seen as valid contenders.

Direct effects of advocacy campaigns on media may be even stronger. First, such campaigns might change journalistic practices by framing female candidates' coverage as an equality issue, appealing to journalistic norms of balance and impartiality (Hopmann *et al.*, 2012; Green-Pedersen *et al.*, 2017). Second, advocacy campaigns may set the media agenda, making gender equality more salient and prompting more coverage of female candidates' expertise and struggles (Gilardi *et al.*, 2022). Finally, campaigns might boost interest in the personal stories of female candidates, particularly those unlikely to enter politics under different circumstances, which could enhance their newsworthiness.

These factors suggest a distinct opportunity for female candidates in our case. Both the "Helvetia ruft" campaign and the 2019 Women's Strike emphasized the importance of gender equality. "Helvetia ruft" aimed to increase female representation in Swiss politics with initiatives like mentoring programs and new narratives about women's representation. These efforts may have made female candidates more newsworthy by highlighting underrepresentation and offering media training to enhance candidates' visibility.

Thus, we expect that the increased opportunities created by these campaigns likely led to a more equal share of coverage for female candidates in 2019. Therefore, our first hypothesis is that gender bias in coverage decreased in the context of the women's representation campaign:

H1: Coverage of female and male candidates was more equal in 2019 compared to 2015.

Previous research has identified mechanisms for unequal coverage (Van der Pas and Aaldering, 2020; Lühiste and Banducci, 2016). Gender bias may arise from "media logic"—journalistic networks and stereotypes favoring male candidates—or "party logic," where female candidates receive less coverage due to their lower placement on electoral lists, reflecting lower viability. Media logic might be addressed by campaigns like "Helvetia ruft," which promote gender equality and appeal to journalistic norms. However, party logic, linked to candidate placement and viability, might be harder to change.

Incumbency and chamber are also factors affecting coverage. Female candidates are less likely to be incumbents, especially in Switzerland's Council of States, where only 15 percent of officeholders were women, many of whom did not run for re-election. Since incumbents generally receive more coverage, this disadvantages female candidates, especially in high-profile races. Such factors–incumbency, chamber, and list place–reflect candidate viability, shaped by party logic.

We expect campaigns to reduce bias in media logic more than in candidate viability. If the campaign succeeds in removing bias stemming from media logic, we expect viability factors to entirely explain differences in coverage in 2019 but not in 2015. As such, our second hypothesis is:

H2: When accounting for viability, differences in the coverage of female and male candidates persisted in 2015 but not in 2019.

2.3 Campaigns for equal representation and issue coverage of candidates

To understand the effect of campaigns for equal representation, we must also consider their impact on the type of coverage female candidates receive. Research suggests that focusing on female candidates mainly in terms of social issues may cause voters and party leaders to question

¹While the Women's Strike did not focus on nominations, it also had cross-party support, similar to Helvetia ruft. Though initiated by unions and mainly left-leaning, it was supported by centrist politicians.

their competence in handling male-associated issues central to national politics (Kittilson and Fridkin, 2008, 386). Thus, the type of coverage matters. Traditionally male topics include economic and foreign policy (Kittilson and Fridkin, 2008), while stereotypically female topics cover social issues, healthcare, education, and gender (Kahn and Goldenberg, 1991).

Research on issue coverage has been inconclusive (Van der Pas and Aaldering, 2020, 132), partly due to challenges in measuring bias. Differences may reflect bias—women quoted mainly on "female" topics or candidates' strategic focus. Moreover, female candidates may choose to emphasize stereotypically female topics for electoral reasons (Herrnson *et al.*, 2003), meaning unequal representation could reflect campaign strategy rather than media bias.

Given these factors, our expectations for the 2019 election are mixed. Increased attention to unequal representation might lead journalists to cover both genders on similar issues or include women in traditionally male topics. However, the women's strike and its focus on social issues like gender equality, childcare, and welfare may have heightened the salience of stereotypically female topics. This could lead female candidates and media outlets to prioritize these issues, which are often more relevant to female voters. Research shows women can benefit electorally from perceived competence on these topics when they are prominent (Herrnson *et al.*, 2003). Journalists might also view reporting on these issues as a way to balance undercoverage of women elsewhere.

Thus, despite the focus on unequal coverage, we expect gender differences in issue coverage to persist:

H3: Differences in the issue coverage of female and male politicians persisted in 2019.

2.4 The role of specific campaign events

To explore *how* the campaign and the women's strike impacted media coverage of the election, we will test whether the hypothesized reduction in gender bias was tied specifically to the national women's strike or present throughout the entire campaign. Previous research on the 2019 Swiss election highlighted that gender equality was most prominent immediately before and after the women's strike (Gilardi *et al.*, 2020), rather than during the overall campaign. This suggests that the equalization of coverage may have been driven largely by the strike and candidates supporting it.

This aligns with political science research showing that "focusing events" can set the agenda for political campaign coverage (Green-Pedersen, 2019; Muñoz et al., 2020; Gessler and Hunger, 2022). Such studies often emphasize the unexpected nature of events (Muñoz et al., 2020), but the long-planned women's strike differs from this pattern. The strike was also related to the "Helvetia ruft" campaign, which supported female candidates throughout the campaign. However, scheduled events like the strike may enable newspapers to plan coverage and allocate more resources to related topics and candidates. Media outlets might anticipate interest in female candidates peaking around the strike. Therefore, even if we see more coverage of female candidates, it's crucial to assess whether this was a temporary boost or a sustained equalization.

We will examine whether the increase in attention to female candidates was primarily driven by the women's strike by comparing the coverage of female candidates before and after the strike, and matching this with similar periods in the previous election to account for variation across the electoral cycle.

H4: The coverage of female candidates increased after the women's strike compared to the period before it.

2.5 The case

By focusing on Switzerland, we diverge from much of the literature that centers on the United States, limiting the explanatory power of existing studies for our case. Studies that find a reduction

in bias often attribute this to the growing importance of partisanship (Hayes and Lawless, 2015). In the US, reduced gender bias is partly a side-effect of increased political polarization. In contrast, such polarization has not occurred to the same extent in Switzerland or other European multi-party systems. However, media presence and name recognition remain important for candidates in Switzerland, where the open-list PR system allows voters to support specific candidates, who also compete against fellow partisans (Selb and Lutz, 2015).

The 2019 federal elections, the context of our study, saw a historic rise in female representation in parliament, reaching 42 percent (see: Figure A.1). Several factors contributed to this outcome (Giger et al., 2022). First, almost all parties nominated more female candidates, and on average, women held better positions than men on party lists. Second, female candidates were about one percentage point more likely than men to be elected, controlling for various factors. Third, women gained an additional boost from the Greens, which had the highest share of female candidates (slightly over 50 percent) and saw the largest increase in seats. Fourth, the Helvetia ruft!" campaign, led by Alliance F, raised awareness about women's representation, supported female candidates, and pushed parties to improve gender balance. Lastly, the June 14, 2019, women's strike became the largest street protest in decades. For these reasons, the 2019 elections were dubbed "women's elections," as gender issues gained unusual prominence on the Swiss political agenda.

Beyond the 2019 elections, Switzerland is notable for its late introduction of women's suffrage in 1971. Nevertheless, Switzerland can be considered a "typical case" for studying women's representation, with the share of women in parliament closely matching expectations from multivariate regressions (Gilardi, 2015). Moreover, studies on Switzerland (Rohrbach *et al.*, 2020) have confirmed gender bias, though they focus on differences across regions and media channels.

3. Data and methods

Most previous studies on gender bias in election coverage, including recent ones, rely on human-coded samples (e.g. Gidengil and Everitt, 2003; Dan and Iorgoveanu, 2013; Dunaway et al., 2013; Bystrom and Dimitrova, 2014; Hayes and Lawless, 2015; Conroy et al., 2015; Fernandez-Garcia, 2016; Foster Shoaf and Parsons, 2016). In contrast, we provide an automated measure to compare mentions of male and female politicians during two election campaigns in Switzerland. We focus on print media rather than television or radio programs partly for technical reasons but also because print media report more extensively on political matters (Druckman, 2005, 469). Moreover, in Switzerland cantonal party sections have a decisive say in the selection of candidates and conduct election campaigns within their constituencies. For cantonal political news, especially during election campaigns, newspapers convey the richest information as the newspaper market in Switzerland remains comparatively fragmented.

We use newspaper articles from the election years 2015 and 2019 to compare the change in coverage of female candidates between two consecutive elections. We collected 1,041,122 articles from 90 newspapers in 2015 and 1,200,395 articles from 86 newspapers in 2019 through the Swiss media database, totaling 91 distinct newspapers over both election cycles.³ On average, the daily number of articles published was 3,414 in 2015 and 3,936 in 2019. For more details about the different newspapers, see Table A.10.

We identified news articles featuring at least one candidate using a dictionary compiled from the official list of candidates in each election running for seats in the National Council (*Nationalrat*) or the Council of States (*Ständerat*). The final list included 3,788 candidates in 2015 and 4,652 candidates in 2019. Of the original 2.24 million newspaper articles, about 5.3 percent mentioned at least one candidate. Therefore, we ended up with a corpus of 121,611

²For the evolution of female candidacies and female parliamentarians, see Figures A.10, A.11.

³https://www.smd.ch

individual texts for both time periods. In total, we found 375,178 mentions of the candidates in these texts. This means that on average, each text with a match mentioned just over three different candidates. Of all candidates on the official lists, only 46.2 percent in 2015 and 46.9 percent in 2019 were mentioned at least once in a newspaper article. The gender distribution in the lists corresponds almost perfectly to the distribution of the candidates in the text data.

Building on this corpus, we measure media coverage of individual candidates. Similar to other studies, our primary dependent variable is the amount of coverage individual politicians receive (Gattermann and Vasilopoulou, 2015; Hayes and Lawless, 2015; Sensales and Areni, 2017). We exclude the seven members of the Federal Council as well as party leaders, given previous research on systematic differences in bias in the coverage of low- and high-level candidates (Gattermann and Vasilopoulou, 2015). However, we report our key results, also including these leading politicians, in the Appendix.

We employ two different types of models because the focus of the analysis is different. In H1 and H2, we are interested in differences across individual candidates. Hence, count data that provides the number of mentions each candidate receives best suits this analysis. Our analysis for H3 is closely related to this, but compares the average share of topics in which the candidate's name appears. By contrast, in H4 we are interested in differences over time. Given that many candidates are mentioned only a few times, an aggregate approach that tracks the visibility of female candidates as a group seems more appropriate for this analysis. This results in different modeling strategies: a negative binomial model for count data and an OLS model for the proportion of female mentions within news articles. We detail these approaches below.

To systematically compare attention to candidates between 2015 and 2019 (H1 and H2), we utilize a negative binomial model to analyze the count of media mentions that candidates receive. The main independent variables are gender, election year, and their interaction. This model also accounts for whether candidates are running for the Council of States or the National Council, their list placement, incumbency status, party, and cantonal fixed effects. We replicate these results using multilevel models with the canton as a level-two variable.

Next, to understand the substantive content of the coverage of candidates and to measure potential gender bias in issue coverage (H3), we combine our measure of media coverage with data on the topic of each article. We build on the results of a supervised classifier we used in previous work, which is explained in detail in the Appendix (Gilardi *et al.*, 2022). We extend this classifier to articles from 2015 and measure the distribution of articles according to our 18 topics. To distinguish between stereotypically male and female issues, we use the classifications introduced by Kahn and Goldenberg (1991) and Kittilson and Fridkin (2008), who classify policy fields based on gender stereotypes. Then, we descriptively compare the share of the coverage an average female or male candidate receives that is connected to these issues.

When we look at the classification of political articles (including all articles, whether candidates are mentioned or not), we find some minor differences in the frequency for the different topics. Most notably, both the gender and the environment issues are more salient in 2019 than they were in 2015, while traditionally salient issues like immigration are slightly less prominent. This underpins the importance of gender in the 2019 elections discussed in previous research (Gilardi *et al.*, 2022).

Finally, we study the impact of the 2019 national women's strike on the proportion of daily mentions of female candidates in the media compared to all mentioned candidates (H4). In this analysis, the dependent variable is the share of mentions of female candidates, which we track over time. We descriptively present the smoothed average of the shares of articles that mention women as a proportion of articles mentioning any candidates. Additionally, we estimate a linear regression (OLS) model, where the election year and the temporal proximity to the national women's strike are the key independent variables, controlling for month and weekday. We use this model to compare the period before and after the date of the strike, using 2015 as a reference to account for variation across the electoral cycle.

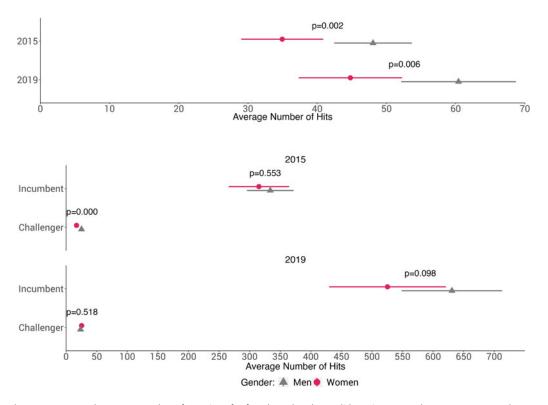


Figure 1. Top panel: average number of mentions for female and male candidates in 2015 and 2019. Bottom panel: average number of mentions for female and male candidates in 2015 and 2019, conditional on incumbency status.

4. Results

4.1 Media coverage (H1 and H2)

We first descriptively examine the overall mentions per candidate. Figure 1 shows that differences in the average number of mentions for male and female candidates existed in both 2015 and 2019. The first panel presents the overall average number of mentions for female and male candidates in these years, revealing that gender differences were present in both 2015 and 2019 (H1). While both genders received more coverage in 2019, a substantial gap between female and male candidates persists. The second panel addresses heterogeneity by disaggregating by incumbency status. It reveals a large gap between the average number of media articles about incumbents and challengers. The gender gap—which was present in both groups in 2015 - increased slightly for incumbents in 2019. Female challengers, however, drew even with their male counterparts. One reason for the increased difference for incumbents is the unusually high number of incumbent women in the Council of States not running for re-election in 2019 compared to 2015 (see Table A.4), meaning a larger proportion of incumbents were running for the lower house in 2019. We replicate this result in Figure A.2, including party leaders and members of the Federal Council. This robustness check confirms our results, including the closing of the gap for challengers. We also present an overview of the most-mentioned female and male candidates in both elections in Figure A.3. Overall, we find some support for our first hypothesis of more equal coverage.

While female candidates were still mentioned less on average, we now ask to what extent these differences persist when we account for additional viability characteristics of the candidates (H2). Our results show that the gender gap in media coverage sharply decreased in 2019 compared to

2015, especially when accounting for candidate characteristics related to viability (Table 1). Importantly, the models include party fixed effects, which account for different rates of media attention across parties.

Specifically, the first model (1a) shows a sizable but statistically not significant reduction of gender bias in 2019 when controlling only for party. The second model (2a) controls for important predictors of viability such as incumbency status, party affiliation, a high rank on party lists, and candidacy for the higher-visibility Council of States. This model highlights the persistence of a significant gender gap in 2015, which was mostly compensated in 2019. In other words, in 2015, the media mentioned male candidates more frequently than female candidates, while in 2019, male and female candidates were mentioned at a similar rate once we control for a range of viability characteristics. This relation is similar for a multi-level specification (Models 1b and 2b).

We address the role of incumbency by splitting the sample into only incumbents (Model 2c) and only non-incumbents (Model 2d). Here, the gender gap in coverage is much smaller and statistically not significant when we consider only incumbents. While the interaction effect of male gender and 2019 is negative, its size is marginal. Of course, these results are based on a much smaller sample of only 387 candidates. Among non-incumbents, we see a sizable gender gap that is significantly reduced in 2019. Hence, more equal coverage in 2019 mostly stems from the coverage of non-incumbents.

Thus, the results for Hypotheses H1 and H2 are mixed, as coverage is more equal in 2019, but viability characteristics cannot fully explain the gap.

4.2 Issue coverage (H3)

In addition to the quantity of coverage for male and female candidates, its quality and the specific issues alongside which candidates are mentioned are also crucial. One-sided issue coverage may

Table 1.	Negative	hinomial	models
I able 1.	Negative	DILIOITHAL	IIIOueis

	Model 1a	Model 1b	Model 2a	Model 2b	Model 2c	Model 2d
Male	0.26***	0.29***	0.38***	0.38***	0.14	0.40***
	(0.08)	(0.08)	(0.06)	(0.07)	(0.12)	(0.07)
2019	0.33***	0.32***	0.21**	0.22**	0.44**	0.19**
	(0.08)	(0.08)	(0.07)	(0.07)	(0.14)	(0.07)
Male*2019	-0.12	-0.12	-0.26**	-0.26**	-0.00	-0.26**
	(0.10)	(0.10)	(0.08)	(0.09)	(0.17)	(0.09)
Council of States			2.05***	2.04***	0.51***	2.58***
			(0.13)	(0.12)	(0.10)	(0.17)
Top list			-0.04***	-0.04***	-0.03	-0.04***
·			(0.00)	(0.00)	(0.02)	(0.00)
incumbent			2.61***	2.60***		
			(0.09)	(0.09)		
(Intercept)	2.86***	2.87***	2.11***	2.24***	5.36***	2.07***
	(0.11)	(0.15)	(0.11)	(0.18)	(0.26)	(0.12)
Multilevel		1		✓		
Party FEs	✓	✓	✓	✓	✓	✓
Cantonal FEs			✓		✓	✓
AIC	52, 321.02	52, 241.44	49, 394.90	49, 457.30	5442.47	43, 561.50
BIC	52, 395.57	52, 322.77	49, 659.22	49, 558.97	5592.89	43, 816.70
Log Likelihood	-26149.51	-26108.72	-24658.45	-24713.65	-2683.23	-21742.75
Deviance	7745.02		7512.94		453.73	7016.85
Num. obs.	6486	6486	6486	6486	387	6099
Num. groups: canton		26		26		
Var: canton (Intercept)		0.18		0.53		

Dependent variable: media coverage, operationalized as the daily frequency of newspaper mentions of female political candidates. The unit of analysis is the individual candidate.

^{***}p < 0.001; **p < 0.01; *p < 0.05.

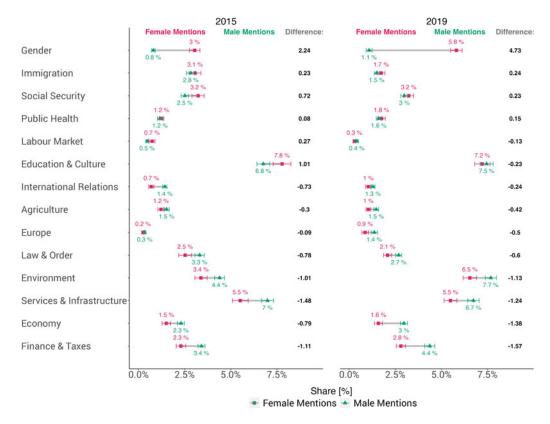


Figure 2. Share of mentions for an average female or male candidate in a given topic sorted by the size of the difference between women and men in 2019. For example, in 2015, 3 percent of mentions of an average female candidate were related to gender, while for men the topic gender made up only 0.8 percent of all mentions in newspapers.

lead citizens to doubt women's competence in topics they are not traditionally associated with. Figure 2 compares the share of mentions of an average female or male candidate that is associated with a given topic. In other words, the dependent variable measures the share of the mentions of an average candidate—irrespective of quantitative differences in the number of mentions—that is linked to a certain topic. The figure shows how an average candidate of each gender "made it into the news." For example, in 2015, 1.2 percent of mentions of an average female candidate were in Agriculture, while for men, the topic Agriculture made up 1.5 percent of their mentions in newspapers. That is, for a hundred articles about a candidate, roughly one will mention them in connection to agriculture. (Note that the numbers do not add up to a hundred percent as we exclude horse race coverage—by far the most prominent type of coverage for both women and men—from this analysis.)

For both female and male candidates, the topics of Services & Infrastructure, Education & Culture, and—in 2019—the Environment were among the most significant issues they received coverage on. However, we also observe clear gender differences, some of which persist over time. Women are less frequently covered regarding the economy, finance, and taxes in both years. In contrast, they are covered more concerning Social Security (in 2015), Immigration, and most notably Gender. The latter is particularly pronounced in 2019 when almost 6 percent of articles covering an average female candidate are about gender, compared to only 1.1 percent

⁴We replicate these results, including party leaders and members of the Federal Council, in Figure A.5 without substantive differences.

for men. Hence, despite growing equality in the volume of coverage, the substance of coverage continues to differ. This aligns with the literature outlining "typically male" and "typically female" issues, with many of the "typically female" issues considered low-prestige policy fields (Escobar-Lemmon and Taylor-Robinson, 2005). Therefore, H3 is supported, and there is no indication that the advocacy campaign has changed the issue coverage female candidates receive.

In the Supplementary Materials, we replicate this figure differentiating between incumbents (Figure A.6) and non-incumbents (Figure A.7). The results are by and large similar among both incumbents and non-incumbents, although differences are slightly more pronounced for gender, economy, and finance among non-incumbents, and for social security among incumbents. Considering non-incumbents as a potential new generation of politicians, these findings support our conclusion of persistent differences in the type of coverage that follows stereotypical lines. Moreover, Figures A.6 and A.7 show that female challengers were not more aligned with the issues raised by the campaigns than incumbents were, at least not in terms of the media attention they received. For example, the main issue of the 2019 election was clearly the environment. The share of media mentions of female candidates in connection with that issue increased significantly from 2015 to 2019, but in a similar way for both incumbents and challengers (challengers: 3.4 percent in 2015, 6.6 percent in 2019; incumbents: 3.6 percent in 2015, 6.9 percent in 2019).

4.3 The role of the women's strike (H4)

Finally, we address our fourth hypothesis regarding the temporal relation to the women's strike. Was the gender-related coverage of female politicians shown in the previous sections related to the women's strike that raised the profile of the gender issue in 2019? And did female candidates generally receive more coverage, or only surrounding the strike? Here, the dependent variable is the number of articles that mention at least one woman, as a share of all articles that mention any candidate.

Figure 3 shows the distribution over time of the mentions of female candidates for all newspaper articles, as well as (in the lower panel) for the gender topic. The first panel (all newspaper articles) shows that the share of mentions for female candidates varies considerably over the campaign cycle and slightly declines towards the day of the election in 2015. This decline could be due to viability becoming a more relevant criterion for journalists in the last stretch of the campaign. In 2019, we do not observe a similar decline; instead, the share is at its highest point immediately before the election. This suggests that electability was not linked to a candidate's gender to the same extent in 2019.

We also examine changes in the share of newspaper articles on gender that mention female candidates to see if a potential decline in attention in the last period of the campaign was compensated by increased attention within the gender topic. However, there is no clear trend, although the baseline level of mentions of female candidates is higher than for other topics.⁵

To examine the aggregate difference between the two periods, Table 2 compares the attention to female candidates before and after the date of the strike in 2019 to the respective periods in 2015. The main idea of the model is to estimate potential differences regardless of the campaign phase (thus, including 2015 as a comparison). However, we also include a specification considering only 2019 in Table A.6 for a more precise estimation of gender differences. The dependent variable is the daily number of articles that mention at least one woman as a share of all articles that mention a candidate.⁶

The most important coefficient is the third one, namely, the interaction of the dummy for 2019 with the period after June 14 (the day of the 2019 women's strike). This coefficient shows the difference in the percentage of articles mentioning at least one female candidate before

⁵We replicate the same analyses, including party leaders and members of the Federal Council, in Figure A.8, with similar results. We also present the general trends in the share of articles that mention at least one woman for each topic in Figure A.9.

⁶An alternative specification with the share of articles mentioning at least one female candidate as a share of all articles, whether they mention candidates or not, is included in Table A.5.

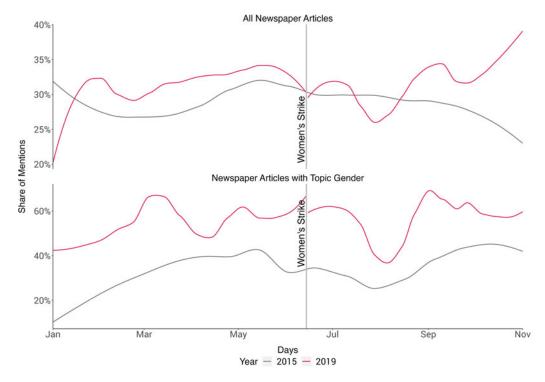


Figure 3. Trends in the daily mentions of female candidates before and after the women's strike for all newspaper articles and those classified as belonging to the gender topic.

and after the women's strike in 2019, relative to the same difference in 2015, when no women's strike took place. The table includes five models. The first considers articles published on any topic, while the rest consider only those focusing on, respectively, gender, the environment, Europe, and immigration—some of the key topics of the campaign.

The results show that the difference in the coverage of female candidates in the media after the women's strike in 2019, compared to the pre-strike period, was roughly the same as that observed comparing the two periods in 2015. This holds both for the overall mentions of female candidates

Table 2. OLS models

	Overall	Overall	Gender	Environment	Europe	Immigration
Strike Year (2019)	4.65***	4.66***	23.53***	7.05**	5.30*	-6.95*
	(0.72)	(0.72)	(4.39)	(2.41)	(2.66)	(2.71)
After women's strike	-1.03	-1.02	-9.71	4.48	-1.18	-0.18
	(1.78)	(1.78)	(10.84)	(5.96)	(6.57)	(6.70)
Strike Year (2019) * After Women Strike	1.13	1.11	-0.68	0.40	-10.58**	1.95
	(1.06)	(1.06)	(6.45)	(3.55)	(3.91)	(3.99)
(Intercept)	26.00***	26.90***	4.23	20.23***	17.98***	18.24***
	(0.90)	(1.11)	(6.75)	(3.71)	(4.09)	(4.17)
Month FEs	1	1	1	1	1	1
Weekdays FEs		1	✓	✓	✓	✓
R^2	0.17	0.18	0.13	0.06	0.04	0.07
Adj. R ²	0.15	0.15	0.10	0.03	0.01	0.04
Num. obs.	610	610	610	610	610	610

Dependent variable: share of articles mentioning at least one female candidate. ***p < 0.001; **p < 0.01; *p < 0.05.

and for specific topics, including gender (but not Europe). The alternative specifications in Table A.5 similarly shows no significant differences between before and after the women's strike. Notably, for all topics except immigration, there is a positive difference in 2019. This means that the share of articles mentioning at least one woman was larger in 2019 than in 2015. However, this positive difference cannot be linked to the women's strike itself as we hypothesized in H4. Substantively, this finding suggests the campaign had a more diffused impact on the coverage of female candidates, providing an encouraging sign for the potential consequences of such campaigns.

5. Conclusion

In this paper, we have addressed media coverage of female candidates in the Swiss 2015 and 2019 elections. Specifically, we discussed how the national "women's strike" and a multi-party advocacy campaign for the nomination of female candidates in 2019 were linked to the media coverage of female candidates. Our results present a mixed picture. Female candidates are still mentioned less than men. However, unlike in 2015, the difference in 2019 is primarily a function of their viability rather than their gender and disappears once we control for list placement, chamber, and incumbency.

In our theoretical discussion, we examined the distinction between party logic and media logic (Lühiste and Banducci, 2016), which helps explain both the persistence and the relative decline of differences. The campaign affected the media environment for all candidates equally and contributed to more equal coverage. However, parties still differed in the extent to which they nominated women and where they placed women on lists. Moreover, particularly in the higher chamber (Council of States), fewer female candidates ran as incumbents. Hence, there was less coverage of female candidates, although—in stark contrast to 2015—gender had little effect on coverage once controlling for these other aspects of candidate viability.

While we have presented a first examination of the potential effect of advocacy campaigns, there are multiple avenues for further research. First, we have mostly focused on aggregate changes without investigating heterogeneity between parties. While we expected the campaign to have effects independent of candidates' party affiliation, feedback effects in parties with a progressive stance on gender issues or strong female networks may well exist. Interactions between campaigns and national and subnational party organizations may also be relevant to consider. Second, further heterogeneity may arise from the choices of candidates themselves. While placements on party lists provide a first step to visibility, different campaign activities such as press statements or social media posts may also influence media coverage of candidates. Although there is evidence that gender influences candidates' social media strategies (Wagner et al., 2017; Beltran et al., 2021), we cannot systematically test whether engagement with advocacy campaign messages impacts candidate coverage. Such candidate-driven effects may be another source of differences. Third, as our results are based on observational data, future research could investigate the effect of campaigns on media coverage using different approaches. For example, researchers and advocacy coalitions may want to collaborate with specific newspapers, training journalists to become more sensitive to biases in coverage. Moreover, federal systems allow for the implementation of campaigns as field experiments in some parts of the country to gain a precise estimate of the effect of advocacy campaigns. Both strategies could help to further disentangle party and media logic.

Already in their present form, our results have implications for promoting gender equality in politics. Campaigns similar to "Helvetia ruft" and the women's strike can be significant in generating more equal coverage of candidates. However, women will remain underrepresented in political coverage until equality is also achieved in political office and nominations. Research suggests that gender quotas could be an effective way forward (Radojevic, 2022).

Our results are also encouraging regarding the sustainability of advocacy campaigns. While previous research cautioned that attention to gender issues peaked around the Women's Strike

itself (Gilardi et al., 2022), our findings show that the increased attention to female candidates persisted throughout the entire campaign cycle. This attention included new and low-rank candidates who otherwise struggle to make the news. Particularly in the last phase, where the previous campaign saw a decline in articles mentioning women (potentially reflecting the focus on viable candidates close to election day), we observed an increase in articles mentioning women. These factors may contribute to the electoral success of female candidates and highlight the importance of such campaigns.

Despite these optimistic findings, we also observe the persistence of gender differences, particularly in the issues covered in relation to the candidates. This is noteworthy since few studies have measured issue coverage at scale. The development of text-as-data methods for the automated classification of article topics provides new avenues for research on gender equality in politics. We hope other studies will adopt similar methodologies to provide comparative findings. Moreover, a more detailed investigation may disentangle the extent to which candidate choices contribute to or compensate for this gap. Overall, even with the support of an advocacy campaign, female candidates still face an uphill battle in making the news.

Supplementary material. The supplementary material for this article can be found at https://doi.org/10.1017/psrm.2024.63. To obtain replication material for this article, https://doi.org/10.7910/DVN/UQ5R7L.

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