Women Learn while Men Talk?: revisiting gender differences in political engagement in online environments

Abstract

There is an inconclusive debate on whether male and female users of social media platforms engage with political content differently. While some highlight minimal differences others evidence an engagement gap where male are more visible within online environments. Drawing on data from a representative survey of citizens in France, the UK and USA we explore the engagement gap in more granular detail. Our data shows minimal gender differences for most forms of online political engagement, but there remain some indications of a gendered divide. While the feeling of external efficacy is crucial to engage online regardless gender, women appear to need a sense of higher levels of competence in order to engage with online political content, especially for sharing and commenting. The study confirms interest in politics, extreme political ideological views and large social media network as prompt for more eager political engagement, but we do not find any substantial gender differentiation. Our findings suggest some minimal country differences on women engagement in commenting. Overall, our data indicates that while women may be as likely as men to participate in online political expression, through sharing and commenting, and may have an equal overall share of voice, the voices of many women are at least more muted in open public political discussions environment.

Women Learn while Men Talk?: revisiting gender differences in political engagement in online environments

Early research on the development of digital technologies and mass societal adoption raised concerns about an emerging digital divide with women having lower levels of access and skill than men (Liff & Shepherd, 2004). The gendered participation divide has been seen as due to economic and social inequalities of gendered roles, women had less time to be active in political life due to their responsibilities over childcare and running the home (Allwood & Wadia, 2000). However, it is argued that as these responsibilities do not impinge as significantly on online participation, and yet there remain inequalities in participation rates, therefore there is a need to look to psychological factors (Bussemaker & Voet, 2019). In particular, the perceptions of digital spaces being "hostile online environments, as well as conservative gender roles, may also be associated with a gender divide regarding participation in online political discourse" (Kiran 2018). Researchers claim that a "gendered psyche" prevents many women from fully participating in civic life (Lawless and Fox 2010). For example, experimental research shows women "opt-out" of politics due to a lack of confidence and perceived low external efficacy, especially when their participation elicits a negative response from other users (Preece, 2016).

To better understand the extent a gendered divide remains in political engagement we compare survey data from three established democracies, France, the UK and USA, where access to technology is reasonably universal and gender equality laws are similar in order to develop a model that is robust across countries despite systemic differences. We firstly explore the association between gender and the level of engagement with politics online. That is, are women less likely than men to engage, which could contribute to a greater prominence of male voices and opinions and mean men have more influence on political discourse. The second is whether gender is associated with different approaches to engagement online. Studies have shown women tend to use social media for social interactions (Buchi et al., 2017), comment on the posts of others rather than creating posts and avoid conflict in discussions (Vochocova et al., 2015), and so access and read content (Stefani et al., 2021) but are less likely to discuss politics or engage in political debates (Van Duyn et al., 2019). Our findings show that differences are minimal and dependent on the platform and form of engagement and that differences relate to self-perceived levels of efficacy. Concerns regarding a gender gap in engagement appear unfounded and we find indications that social media facilitates greater gender equality in political engagement. However, we do find evidence that women prefer bounded, safer environments. We also offer evidence that women feel more empowered and are more likely to engage due to factors relating to internal efficacy. But largely, the key variables tested have an equal impact on engagement among females and males, with some moderate country differences.

Gendered differences in engagement

The extent researchers found a gendered digital divide depended on the design of the studies: where they took place and how participation was defined. Early studies found minimal gender differences in the use of online environments for civic behaviour (Verba et al., 1997) and where there were differences, gender had minimal explanatory power (Fuller, 2004). However, Fuller found while both men and women used digital resources to be better informed, women were found more pliable in their opinions. Men, meanwhile, were more set in their opinions and more willing to express their views. The imbalance around political debate is found to still divide men and women, with men more active in political deliberation on social media (Jain et al., 2018) meaning women have a lower share of voice online (Koc-Michalska et al, (2019). However, research suggests there are different, gendered, motivations for accessing digital platforms which in turn lead to differing levels of engagement (Jenkins, 2005), but not overall levels of participation in civic life. A meta-analysis of research found a similar pattern in research, there were no gender differences in using digital environments for becoming more political informed, men were more likely to perform expressive acts of political participation (Lutz et al., 2014). Developing this theme, women showed less interest in controversial

or partisan politics, but higher interest in social or environmental issues but no less interest in politics (Wolfsfeld et al., 2016).

Overall then the gender gap is minor (Gil de Zúñiga et al., 2014), but there are granular gender differences in political engagement via digital technology (Lutz et al., 2014). In particular, female users' engagement is moderated by self-perception, as measured by self-declared Internet skills and political interest (Min, 2010). Where significant differences are noted, they are within gender groups not between the genders. Boulianne's (2020) study shows younger women are less likely to consume news online, score lower on civic awareness, and so engage less; which seems consistent with research on younger voters generally (Wattenberg, 2020), the research also emphasizes divides by education attainment (Goldfarb and Prince, 2008). However, gender differences disappear when studying news consumption on social networking sites suggesting social media usage is positively correlated with political engagement among young females. Again, focusing on how women engage and participate reveals interesting differences. Bode's research (2017) found men are more likely to express their political views on social media, although the research did not control for political interest this finding is consistent with a range of studies that show women are less represented in political discussions (see also Lutz et al., 2014; Strandberg, 2013; Vochocova et al., 2016). Bode (2017) also find women as likely as men to encounter content they disagree with on social media, but they are less likely to take a combative position echoing research that women are predisposed to avoid conflict and seek consensus (Schneider et al., 2016). Bode argues women ignore content they disagree with to maintain social relationships, so will moderate their stances or resist the temptation to engage to avoid entering into argumentative dialogue. Hence when looking overall at the way women engage, the gendered differences are subtle and depend on the dependent variables under examination. Hence, we suggest the following hypotheses when considering gendered patterns of engagement controlling for interest in politics:

H1. We expect minimal gender differences in searching for and accessing political information, but

H2.1 We expect women to have a lower propensity to share political content and (H2.2) to comment on political content.

External and internal efficacy

If granular differences in engagement are found, these may be due to perceived self-efficacy. Research indicates women's external efficacy, the extent they can influence others and be taken seriously, may be undermined on some platforms (Southern & Harmer, 2019). The experience of what Fox et al (2015) describe as ambient sexism: rebuttals to comments that suggest political engagement is not a women's domain as they lack the competence can undermine their sense of external efficacy and lead them to self-censor (Maximova & Lukyanova, 2020). Equally, public debates about women being intimidated, threatened or discredited can give the impression the online environment is a hostile space for women considering engaging in political discourse (Sobieraj, 2020). Research has found women seem innately more cautious when expressing their opinions and tend to withdraw if they receive abuse particularly when abuse targets personal or gendered characteristics (Nadim & Fladmoe, 2019). Hence the key moderating variable impacting women's decisions to engage may be the extent they feel they will have the respect of other users and so feel they must have greater levels of political knowledge and argumentation skills than is the case for men (Ahmed & Madrid-Morales, 2020).

External efficacy, the perception one can influence others and that your opinions matter, in the case of women may relate strongly to internal efficacy, and self-perceived levels of knowledge and skills. Women appear more open and reflective about their media literacy skills (Tully & Vraga, 2018) which suggests greater self-awareness resulting in hesitancy to perform acts unless they feel fully competent. Research indicates women possess lower levels of certainty about their political knowledge, albeit referencing a greater propensity to use the 'don't know' option when asked about political issues,

which might indicate lower confidence (Fortin-Rittberger, 2016). The Knowledge Gap Hypothesis (Tichenor et al., 1970) has been shown to explain gender differences in online political engagement (Ahmed & Madrid-Morales, 2020) suggesting confidence is a factor. Furthermore, women were found to discuss politics to develop ideas and understanding as opposed to the male trait of sharing opinions (Malinen et al., 2020) suggesting lower levels of certainty about their stance, demonstrating the link between internal efficacy, self-perceived knowledge, and external efficacy, the capacity to have influence. The fact that political efficacy is found to be lower among women unless they have strong ideological beliefs (Heger & Hoffmann, 2021) reinforces this perspective. Therefore, we hypothesize women's political engagement in online environments will be mitigated by their perceived self-efficacy (Reichert, 2016) both in terms of perceptions they will influence others, as is the case for female activists (Hong & Kim, 2021), or the extent they feel they have confidence in their knowledge and skills (Vicente & Suenaga, 2020). Hence:

H3. We expect commenting will be moderated by **levels of efficacy**, in particular internal efficacy and the feeling one has the competence to participate

Network size and platform affordances

External efficacy has been found to also be moderated by network size. The argument is that feeling one has a large and supportive network increases the likelihood that women will engage in political discussions (Bode, 2017). The extent a network is bounded and feels like a supportive environment depends on specific platform affordances (Heuer & Rangel, 2020). Research shows the larger someone's online network is the more likely they are to be exposed to political information (Kitschelt & Rehm, 2008). If members of a network share political content, then others in the network feel more comfortable expressing their views (Kahne & Bowyer, 2018) and experiencing greater internal and external efficacy (Chan, 2016). Those with large online networks also feel they have greater potential to be influential (Park & Kaye, 2017). These findings link to research showing people follow the patterns of participation they see within their networks, and they are particularly incentivized to participate in an activity if close contacts are also taking part (Bursztyn et al., 2020). Given that Bursztyn et al's research focused on high effort participatory acts, it is likely the correlation between network size and greater activity works also for lower effort online forms of engagement and so having large social networks leads to higher levels of political engagement. Hence:

H4. We expect **a network effect**, where women with a larger support network, indicated by the size of their online community, will be more likely to participate in discussions about politics

While variables relating to network size, partisan character, homogeneity, and frequency of political discussions taking place are positively associated with a range of forms of participation, the positive effects are not always uniform and opportunities to participate are not exploited equally (Carlson et al., 2020). Some studies have related this to the nature of discourse on platforms, with open environments (forums, Twitter) often found to be polarised and uncivil (Anderson & Huntington, 2017), whereas on more closed platforms the quality and civility is higher (Rowe, 2015). Given women avoid discussions that lead to interpersonal conflicts or openly hostile interactions (Vochocova et al., 2015; Maximova & Lukyanova, 2020), the perceived character of discourse on a platform may be a mitigating factor (Yamamoto et al., 2020). Trust in the platform, and trust other users will behave respectfully and honestly are both found to be important for facilitating the engagement of women (Song, 2021).

An affordance shows social media platforms offer varying affordances such as avoiding undesirable content and people, including unfriending, unfollowing, muting and hiding content (Koc-Michalska et al., 2019). Research shows Facebook offers affordances that encourage the participation of women in political discussions, it was rated highly for gaining direct feedback and interacting with a network and for controlling what content was visible (Van Duyn et al., 2019). Also, Facebook enables faster but bounded flows of information and more symmetrical conversations between identifiable users

(Halpern & Gibbs, 2013). These studies highlight Facebook communities are more likely built on strong ties, and therefore communities can act as a support network and a source of motivation to participate in political activism (Valenzuela et al., 2018). Hence:

H5. We expect to find **a platform effect**, with women more prepared to engage in discussions on Facebook

Ideology

Ideological commitment can mitigate network and platform effects and give the confidence required for participating in political discussions. Research shows women's engagement increases if they hold strong attachments to marginalized positions not addressed by government (Memoli, 2016). Such commitments mobilize individuals when exposed to opposing perspectives (Mutz, 1998), although this may not be the case if women avoid conflict (Yamamoto et al., 2020). However, when discussions become highly polarised exposure to content with an opposing position was predictive of hiding disagreeable political content and unfriending (Skoric et al., 2018). Men and women increasingly evidence equal likelihood of holding views across the political spectrum (Caprara et al., 2010), including exclusionary views towards immigrants (Campbell & Erzeel, 2018) and women are only deterred when parties promote traditional gender roles in society (Spierings & Zaslove, 2015). Independent of ideological stance, having a strong stance is argued to be empowering for women (Hong & Kim, 2021) and their strength of commitment enhances their feelings of internal and external efficacy (Heger & Hoffmann, 2021). Hence the strength of ideology may moderate the cautious approach women are likely to take towards joining political debates. Hence:

H6. We expect gender differences across all forms of political engagement to be moderated by political ideology

Our survey enables a cross-country comparison. We do not expect any substantial country differences, as all three countries are well-developed Western democracies with a similar level of participation of women in politics and comparable share of female representatives in the national parliament (France 32%, 26% in the United Kingdom and 25% in the United States, (IPU Parline, 2021) which may positively impact female engagement in politics (Liu & Banaszak, 2017). Similarly, women were major candidates in the elections prior to the data collection (Marine Le Pen in France and Hilary Clinton in US as presidential candidates, or Theresa May as UK prime minister). However, it is only in France where specific gender quotas are required in politics (UN GA, 2013), this is more subtle in the United States, as gender equality is affiliated with party fundraising groups or initiatives designed to promote women in public leadership (UN GA, 2013, p.18). Internet penetration is high (in 2017 83% France, 87% USA and 90% UK (World Bank, 2017)), and also comparable across genders: in the UK (90% of females have access to the Internet, 92% of males (Office for National Statistics, 2019)), the US (91% of females and 90% of males, (PEW, 2019)) and 87% among French women (89% among male) (INSEE, 2019).. The countries are comparable for the percentage of the population above the age of 25 with secondary education in the US (Female 95.7%; Male 95.5%), the UK (Female 82.9%; Male 85.7) and France (Female 81%; Male 86.3%). There is also relatively consistent patterns in the labour market, with the percentage of those over the age of 15 in work: in the US ((Female 56%; Male 68%), the UK (Female 57%; Male 67.8%) and France (Female 50%; Male 60%). Thus, instead of building a hypothesis we ask:

RQ1 Are there any substantial gender differences on engagement with political information, sharing and commenting on political content within the three countries studied?

Methodology

Lightspeed Kantar Group administered a survey to an online panel in May (16-30 in France) and June (9-30 in UK and US) 2017. In total, 4,532 people completed the survey. Quotas were in place to

ensure the online panel matched census data for each country (Table B3 in Online Appendix). The sample sizes are similar across the three countries: France (n=1521), United Kingdom (n=1501), and the USA (n=1510). The survey was conducted in English and French (the formulation of questions is available in Online Appendix Table B1).

DEPENDENT VARIABLES

We aim to explore how diverse online environments and their affordances (online platforms, Facebook and Twitter) determine how online political practices: *engagement with information*, s*haring political content* and *commenting on political content*, are determined by gender differences, as well as other main variables of interest.

Engagement with information: respondents were asked if in the last 12 months they had engaged with information (by searching or seeing information) on online platforms, on Facebook or on Twitter. The respondents could choose from never (1) to very often (4). Among our sample 62% engaged with information online, 42% via Facebook and 17% via Twitter.

Sharing political content: respondents were asked if during the last 12 months they had shared political content online, via Facebook or via Twitter. Among our respondents 39% declared sharing political content online, 33% shared it via Facebook and 14% shared it via Twitter.

Commenting on political content: respondents were asked if in the last 12 months they had commented on any political content on online platforms (blogs and forums) or on Facebook. Among our sample 30% of respondents declared commenting on online platforms and 36% declared commenting via Facebook.

The ordered logistic regressions are used for analysis. The detailed descriptive statistics for each dependent and independent variable can be found in Appendix.

INDEPENDENT VARIABLES

Political ideology a continuous variable which takes values from -5 (extreme left) to 5 (extreme right). *Extreme political ideology* (continuous, squared) takes a value of 1 for those respondents identifying with the ideological centre or a value of 25 if they are positioning themselves as having extreme political views (either left or right).

External and Internal Efficacy (dummy variable) is measured by questions inquiring if respondents feel 'People like me can influence government' (56% of our respondents) and 'I consider myself well qualified to participate in politics' (61% of respondents).

Network size on Facebook and Twitter (continuous, logarithm) indicate the number of friends on Facebook (on average 176) and followers on Twitter (on average 82).

To examine the moderation effect of gender and each independent variable on the dependent variables, interaction terms were introduced to the models.

CONTROL VARIABLES

Gender is our main variable of interest, it is coded as a dummy, with male=0 and female=1. Our sample's gender repartition is similar to that of each country (please see Online Appendix Table B3), with 50.44% of male and 49.56% of female. Gender is employed in the statistical models as a single variable but also as element of interaction with each independent variable.

Countries (dummy) are inserted into the model as dummies for the United Kingdom and France (with reference to the USA). *Age* is introduced as Age (continuous) and Age squared (additionally we use an interaction term for age, as in preliminary descriptive findings we discovered a particular gender gap for the younger generation which disappears in older cohorts (please see Appendix Graph 1)).

Education is measured on a four-item scale (1=High School (44% of sample), 2=Lower Collage (17%), 3=Bachelor Degree (27%), 4=Higher Education (12%)). *Ethnic origin* is recoded into a dummy variable (1=Caucasian, 82%, 0=other). *Interest in politics* coded as four-item scale (1= not at all interested (10%), 2= not very interested (19%), 3= fairly interested (43%), 4= very interested (28%)).

Findings

Gender effects on engagement with political information

Overall, we find very small country or gender differences in terms of engaging in information seeking. In general, respondents from France and the UK are slightly different to their American counterparts, they are less likely to engage with political information, especially on Facebook. However, interestingly, women in the UK are more likely to obtain political information on Facebook than British men, while women in France are more likely to obtain political information on general online platforms. We do not find platform differences for engagement with information in the US. There is no substantial difference in the overall use of Twitter. Therefore, consistent with similar research (i.e. Gil de Zúñiga et al., 2014; Lutz et al., 2014) we find only small and inconsistent differences for engagement with political information and largely females and males are shown to have reasonably equal interest in and access to political information. Therefore, while they may have different issue-level interests, there is no gendered differences in engagement with information about politics in general (Ahmed & Madrid-Morales, 2020). This data confirms H1.

The effect of internal efficacy, believing one has the competence and skills to participate in politics, has a positive effect on searching for information online and obtaining information from the Facebook platform, with no corresponding effect for Twitter. However, corresponding with H3 , our data shows women who have greater self-perceived internal efficacy are definitely more likely than men with internal efficacy to search for information online. This suggests that internal efficacy may indeed play a moderating role (Reichert, 2016), although there is no corresponding effect for obtaining information via social media. This makes sense as searching for information is proactive, while receiving information may result from passive browsing and not involve a need for specialist skills or knowledge. External efficacy has a positive effect (regardless of gender) on searching for information online and obtaining political information on Twitter, but there is no similar effect for Facebook (Malinen et al, 2020).

Those self-reporting a left ideological position are more likely to search for information online, but there is no effect for social media. Extreme views predispose higher engagement regardless of the environment. Ideology does not produce gender differences in relation to information seeking or exposure. Network size on social media (consistent for Twitter) has a positive effect on searching for and receiving political information in any environment. This suggests, consistent with previous research (Kitschelt & Rehm, 2008), having a large community increases interest in issues and triggers a desire to learn more as well as offering a greater opportunity to passively find content shared by those in your network. The larger the network the more content is likely to be viewable. However, platform network size effects are moderated by gender. Women with larger networks are more likely to engage with information compared to men with a similar sized network on one specific platform, but there is no cross-platform effect.

[Table 1 around here please]

Gendered effects on sharing political content

We find no country differences for retweeting or responding on Twitter, however we do find UK respondents less likely to share political content on general online platforms or via Facebook. The respondents in France tend to behave similarly to their US counterparts regardless of the environment. Women in the UK and France share content online more than their male counterparts, although only

within general platforms. Hence, we partially confirm H2.1. and H5 as gendered differences in sharing political content exist within general platforms but they are minimal on social media platforms.

Those who declare being ideologically right-wing are more likely to share political content online and on Twitter, as well as those on either of the ideological extremes who have a higher propensity to share political content within any environment. This effect is the same regardless of gender, suggesting strong ideological commitment increases confidence (Heger & Hoffmann, 2021) as predicted in H6, and motivates users to promote content that matches their ideological stance. As with information seeking and receiving, political interest has a strong and positive effect on the sharing of political content independent of the online environment.

Overall, those who believe they can influence the government (External efficacy) are more likely to share political content independent of the platform and likewise those who feel they have competency (Internal efficacy) share more on general online platforms but not social media. However, in this case there are interesting moderating effects from gender. Women with high external efficacy are less likely than men with correspondingly high external efficacy to share content on Facebook. Yet, in contrast, women with high internal efficacy are more likely to share political content on general platforms and Facebook, again compared to men with similar levels of internal efficacy. This indicates that there are differential effects from different forms of efficacy which appear determined by gender which may be related to their networks (Park & Kaye, 2017; Kahne & Bowyer, 2018). As H4 suggests, network size has a positive and significant effect for sharing content on either platform, but there is no gender difference. We argue females feel higher levels of external efficacy from having a large network and so are more motivated to share political content. Males perhaps assume they will be influential by sharing content independent of the size of their personal network (Chan, 2016).

[Table 2 around here please]

Gendered effects on commenting on political content

US citizens are far more likely than their counterparts in France and the UK to comment about politics. Some granular differences we identify are that women comment on Facebook more than men in the UK and women in France comment on online general platforms more than French men. There is a clear and strong gender difference among US respondents, women are less likely to comment in general online environments, but this effect is not consistent for Facebook. Therefore, it seems Facebook may be seen as offering affordances more conducive for women to feel more confident in debating political issues (Valenzuela et al, 2018) confirming H5, whereas the broader digital environment is not. This chimes with the findings of Rowe (2015) regarding the style of discourse found on different platforms. But overall women in US are less likely to comment about politics, Facebook simply offers greater equality of engagement not a rebalancing of the share of voice women have online.

Efficacy does have predictive power. Those who feel they have external efficacy are more likely to comment about politics, and the effect is similar for both genders on any online environment. Again, an interesting relationship is found for internal efficacy and gender. Women with high internal efficacy are more likely to comment across the digital environment. This finding suggests it is vital for women to feel competent in order to share and comment online (Ahmed & Madrid-Morales, 2020) confirming H3. Again, there is a robust effect from holding extreme political views, which powerfully predicts the propensity to comment on political content in any online environment. But no gender effect is found. Similarly, the larger the network the more likely one is to comment but there is no gender difference, confirming H4 but without a specific gender effect.

[Table 3 around here please]

Discussion

We find minimal gender differences across most forms of political engagement included in our study across all three countries. The equalization effect is especially strong for the US, with the exception being commenting on political content on general online platforms (as American women comment less). However, In France and the UK we find either no gender differences, or that females tend to be more engaged than males. Women in the UK and France have higher engagement levels and a higher propensity to share political content on general online platforms, they also comment more (on general platforms in France and on Facebook in the UK).

Hypothesis 2, which, led by previous research (Van Duyn et al., 2019), predicted that women would have a lower propensity to comment on political content is again, only partially confirmed. It is supported for American women, who declared being definitely less likely to comment on general online platforms, but the effect disappears for Facebook. Females in Britain are more likely than men to comment on Facebook, while women comment more than men in France on general online platforms. Therefore, it would seem females enjoy an equal share of voice online and, in the case of some platforms in some countries, potentially a larger share of voice.

The data shows there are differences in perceptions of efficacy between men and women (see Table B2 in appendix). Independent of these differences we find that external efficacy appears to have a similar impact on men as women. It predicts a higher propensity for sharing and commenting on political content. The gender gap is larger for internal efficacy, it is revealed to be a strong factor enabling women to engage more, especially importantly for commenting (Fortin-Rittberger, 2016), followed by sharing on online general platforms and on Facebook. The fact internal efficacy is strongly predictive of women's political engagement suggests there may be a gender imbalance. While men seem unconcerned by perceptions of their own competence, or that they could come under attack for lacking the skills or knowledge to participate in political discussions, women are. Hence hypothesis three is supported, and we find lack of internal efficacy to potentially be a barrier to female engagement.

Hypothesis 4 is not supported, we do not find a network effect which moderates the sharing and commenting practices of women. The effect exists, the larger the network the higher the engagement in sharing and commenting regardless of the environment, but it is not moderated by gender.

Platform effects follow the predictions of hypothesis five. Women seem to find Facebook a safer space than the wider online environment leading them to be equally likely to share and comment on political content within the confines of their community. This may be an indication that the wider, more public, digital environment is perceived to be a less safe space (our data does not allow us to make a direct comparison with Twitter for commenting on political content). If women do feel they are likely to find themselves the victims of ambient sexism (Fox et al, 2015) then it follows that they will avoid these open environments. Women with high internal efficacy will mostly politically engage on Facebook, avoiding less bounded and so unsafe environments. If the network is seen as an extended friendship group who will provide support and defence this may give further impetus for women to have higher levels of engagement with politics. Therefore, we suggest that the strong ties which can form around friend networks on Facebook are key affordances which facilitate women to engage more with politics (Valenzuela et al., 2018). As for political ideology (H6), it is not a distinction between left and right, but rather the strength of the positioning, as having extreme political views (from either side) is a strong predictor of engaging. However, the effect of political ideology is not moderated by gender confirming our hypothesis.

The hypotheses which have been confirmed were developed from models which control for interest in politics, a powerful predictor of political engagement, thus our findings add to previous literature (for example Bode, 2017) by incorporating this important confirmatory control factor.

Conclusions

Overall, we find that there are minimal gender differences when we focus on these online forms of political activities. However, the marginal differences identified through more granular analysis may offer significant indications of potential gendered differences in online engagement. Women appear to need to feel they have higher levels of competence in order to engage with online political content. But even when they feel they have the competencies, they appear to prefer the comparatively safer space offered by Facebook, surrounded by a supportive friendship network built on stronger ties, and they are less likely to venture out into the wider digital environment and share their opinions. This means that despite the minor differences, there may remain a gender gap in online public presence. It is likely that while women are as likely as men to participate in online political expression, through sharing and commenting, and have an equal overall share of voice, the voices of many women are at least more muted in open public political discussions and their voices are heard within the confines of their own networks.

The aim of the research was to develop a robust generalizable understanding of the 'political engagement gender gap' within nations where there should be minimal barriers to equality. The generalisability of the findings are of course limited by the selection of nations and the results may be impacted by the particular political context when the survey was completed. Hence further research is required to test these findings further at different times and within a broader range of nations. More importantly we can only make certain assumptions regarding the minor differences we detect based on specific political activities included in our study. More in-depth understandings of the relationship between the engagement of female social media users and their perceptions of platforms, the norms of behaviour of other users and the style of interactions are required. Further research is also required on the perceptions of women regarding the extent that some platforms or spaces can be hostile environments which cause them to be reluctant to share their views. There is also a need for more multi-platform research, incorporating the range of platforms used, and the affordances they can offer women seeking to engage in political deliberation. The gender gap is small, but it might be of significance in terms of having a more balanced public political debate. Thus, greater understanding of why women do not feel equally comfortable sharing their views in different online environments is needed, as it is a necessary element to foster public visibility and potential political influence of female voices.

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Table 1. Engaging with political information						
	Online_platforms		Facebook		Twitter	
	Coef		Coef		Coef	
Female	0.113		0.048		-0.725	
Age	-0.017		-0.015		0.018	
Education	0.152	***	-0.057		0.015	
Ethnicity	-0.123		-0.124		0.217	
Interest in politics	0.996	***	0.471	***	0.481	***
Political_Id (Left–Right)	-0.040	*	-0.014		0.006	
Political_Id*Female	0.011		-0.018		0.003	
Ideological Extremity	0.016	**	0.021	**	0.016	±
Ideological Extremity*Female	0.001		0.009		-0.003	
External efficacy	0.261	**	0.143		0.274	±
Internal efficacy	0.336	**	0.385	**	0.167	
External Efficacy*Female	-0.098		0.045		0.253	
Internal Efficacy*Female	0.430	**	-0.125		0.041	
Facebook network size (ln)	0.091	***	0.510	***	-0.040	
Twitter network size (ln)	0.078	**	0.100	***	0.630	***
FB net*Female	-0.003		0.077	±	-0.032	
TW net*Female	0.028		-0.072	±	0.104	*
UK	-0.254	*	-0.506	***	-0.161	
FR	0.207	±	-0.760	***	-0.386	*
UK*Female	0.277	±	0.437	*	0.256	
FR*Female	0.425	**	-0.312	±	-0.011	
N			3566			
AdjR2	0.146		0.203		0.316	
±p<0.10,*p<0.05,**p<0.01,***p<0.001						

Table 2. Sharing political content	Online_platforms		Facebook		Twitter	
	Coef		Coef		Coef	
Female	-0.509		-1.023		-0.954	
Age	-0.065	***	-0.011		0.035	
Education	0.165	***	0.013		0.042	
Ethnicity	-0.575	***	-0.520	***	-0.105	
Interest in politics	0.632	***	0.506	***	0.538	***
Political_Id (Left–Right)	0.035	±	0.024		0.060	*
Political_Id*Female	-0.009		0.004		0.006	
Ideological Extremity	0.033	***	0.043	***	0.032	***
Ideological Extremity*Female	0.003		-0.014		-0.006	
External efficacy	0.432	***	0.553	***	0.573	**
Internal efficacy	0.264	*	0.103		0.074	
External Efficacy*Female	-0.001		-0.329	±	0.203	
Internal Efficacy*Female	0.276	±	0.527	**	0.310	
Facebook network size (ln)	0.141	***	0.468	***	-0.003	
Twitter network size (ln)	0.102	***	0.122	***	0.595	***
FB net*Female	0.010		-0.005		-0.046	
TW net*Female	0.037		-0.019		0.080	
UK	-0.591	***	-0.367	**	-0.170	
FR	0.071		-0.155		-0.227	
UK*Female	0.440	*	0.260		0.163	
FR*Female	0.486	**	-0.091		0.241	
N	3566					
AdjR2	0.1491		0.2050		0.3321	
±p<0.10,*p<0.05,**p<0.01,***p<0.001						

Table 3. Commenting on political content				
	Online_platforms		Facebook	
	Coef		Coef	
Female	-1.553	*	-0.659	
Age	-0.025		0.013	
Education	0.102	**	-0.005	
Ethnicity	-0.576	***	-0.435	***
Interest in politics	0.519	***	0.491	***
Political_Id (Left–Right)	0.029		0.031	
Political_Id*Female	0.049		-0.007	
Ideological Extremity	0.022	**	0.041	***
Ideological Extremity*Female	-0.000		-0.015	
External efficacy	0.574	***	0.473	***
Internal efficacy	0.224	±	0.218	
External Efficacy*Female	-0.092		-0.123	
Internal Efficacy*Female	0.392	*	0.294	±
Facebook network size	0.143	***	0.496	***
Twitter network size	0.122	***	0.109	***
FB net*Female	0.023		-0.002	
TW net*Female	0.025		-0.033	
UK	-0.273	*	-0.430	**
FR	-0.432	***	-0.324	*
UK*Female	0.249		0.355	±
FR*Female	0.370	±	0.082	
N	3566			
AdjR2	0.1559		0.2009	
±p<0.10,*p<0.05,** p<0.01,***p<0.001				