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# Predispositions, partisan media, and political beliefs about female presidency in South Korea and the United States

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This study investigated the effects of political predispositions and partisan media use on beliefs about candidates' gender in political campaigns. The analysis of two national surveys, one in South Korea (Study 1) and one in the United States (Study 2), found associations between individuals' political predispositions and beliefs regarding candidates' gender that aligned with their political ideology and party affiliation. The results also showed that partisan media use was significantly related to such beliefs. In addition, the findings demonstrated a mechanism through which partisan media use significantly influenced individuals' voting intention via beliefs. In other words, frequent exposure to politically slanted media increased the activation of negative or positive beliefs, which in turn affected citizens' voting intention.

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## Introduction

One phenomenon that characterizes people's information choices is their selection of news sources based on their own political views and predispositions. In other words, citizens seek out information congruent with their preexisting views, a behavior known as selective exposure (Klapper, 1960; Sears & Freedman, 1967). Drawing on early notions about selective exposure to explain minimal persuasive media effects (Klapper, 1960), communication scholars have recently turned their attention to the consequences of partisan media use (Dilliplane, 2011; Gil de Zúñiga, Correa, & Valenzuela, 2012; Stroud, 2011). This study contributes to this discussion by exploring the connection between partisan media use and citizens' political beliefs, which may in turn influence voting intentions.

While some researchers have examined the effects of partisan media use on attitudinal polarization and political participation (Dilliplane, 2011; Gil de Zúñiga et al., 2012), few have explored the relationship between citizens' politically slanted media use and their beliefs regarding candidates' demographic characteristics, such as gender. Investigating citizens' beliefs regarding political candidates has obvious significance because individuals' political beliefs are associated with their political attitudes and behaviors (e.g., Riggle, Ottati, Wyer, Kuklinski, & Schwarz, 1992). In particular, exploring how citizens form their beliefs about social groups or identities has obvious practical and theoretical significance. Research regarding beliefs or stereotypical perceptions has suggested that the way the media portrays social groups or individuals (e.g., African Americans, women, gays and lesbians, and older people) influences public beliefs (Mutz & Goldman, 2010). The extant literature on this topic has focused on general media use, and little is known about citizens' formation of political beliefs in the context of partisan media—in other words, how citizens' use of politically slanted media relates to their political beliefs associated with candidates.

The current study, therefore, aims to extend the literature on the belief gap by investigating the role that exposure to partisan media plays in activating political beliefs regarding candidates. This investigation is particularly relevant in a social environment in which political groups are divided and polarized based on their political orientations. This study used the social categorization process, which suggests that people tend to give more positive evaluations and trust toward ingroup members than outgroup members (Otten & Moskowitz, 2000), as its theoretical framework. The belief gap hypothesis, which refers to the idea that political orientation plays a significant role in the distribution of politically contested beliefs (Hindman, 2009), suggests that citizens' politically slanted media use can lead to different political beliefs between political ingroup and outgroup members. Based on these frameworks, this study tests whether and how politically slanted media use by citizens could play a role in forming positive or negative beliefs related to political candidates. Furthermore, this study explores whether and how such beliefs influence citizens' voting intention. Thus, this study aims to make a theoretical contribution to the literature by providing empirical evidence of the mechanism by which politically slanted media use may contribute to belief gaps, which then, in turn, affect individuals' voting decisions.

In particular, this study provides results validated across two different cultures through its analysis of data drawn from South Korea and the U.S. Candidates' gender was a prominent issue in both countries during the 2012 South Korean and the 2016 U.S. presidential election campaign periods. South Korea's first female presidential candidate, Geun-hye Park, ran as a representative of the leading conservative party in the 2012 presidential election, and a female candidate, Hillary Clinton, ran as the Democratic

Party's presidential candidate in the 2016 U.S. presidential election. Given these opportunities, this study examined the association between people's partisan media use and their beliefs regarding female candidates—that is, whether they believed their nation was ready to have a woman President—as well as how such beliefs were associated with their voting intention toward political candidates.

## Literature review

**Belief gap.** Beliefs are defined as claims or ideas about “reality that are not based on evidence, but are instead based on value systems, loyalties, reference groups, social institutions, elite opinions, and ideological predispositions” (Hindman, 2012, pp 589–590). Beliefs are unfalsifiable statements that are formed based on one's supposition or wishful thinking, meaning that any belief may or may not be true and there is no consensus about a correct answer upon which to make a judgment (Veenstra, Hossain, & Lyons, 2014). Given that individuals' beliefs play important roles in influencing attitude formation and social and political behaviors (Allport, 1954), a body of research has examined how citizens form their beliefs about race (Dixon & Linz, 2000), scientific issues (Hindman, 2009), and politics (Hindman, 2012), among other topics.

Numerous studies have focused on how the mass media portray certain groups (e.g., African Americans and immigrants) and how exposure to such media may influence individuals' beliefs or perceptions of these groups (e.g., Dixon & Linz, 2000; Mutz & Goldman, 2010). Founded as an immigrant nation composed of citizens of different races, ethnicities, and religious views, the United States has repeatedly confronted issues resulting from the diverse beliefs of its citizens (Dixon & Linz, 2000). For example, African Americans are often related in the media to criminality; research has indicated that exposure to such coverage activates racially charged beliefs among media users (Dixon, 2008; Dixon & Linz, 2000).

The belief gap hypothesis posits that political ideology plays a stronger role than education in predicting the distribution of beliefs regarding contested issues (Hindman, 2009). The belief gap framework is an extension of the knowledge gap hypothesis, which addresses disparities in knowledge among higher and lower socioeconomic status (SES) groups resulting from information disseminated by mass media (Tichenor, Donohue, & Olien, 1970). Disparities in knowledge acquisition between SES groups occur because higher SES individuals (e.g., highly educated people) tend to acquire and process information from mass media at faster rates (Tichenor et al., 1970; Wei & Hindman, 2011). While the literature on the knowledge gap hypothesis has focused on gaps between information haves and have-nots, especially SES indicators such as levels of education, the belief gap hypothesis takes into account individuals' political ideologies, which may cause disparities in political beliefs and opinions. Hindman (2009) proposed that citizens' political ideologies, operationalized as self-identification on the liberal-conservative spectrum, would play an important role in the distribution of politically disputed beliefs. For example, he found a significant association between ideology and beliefs about global warming; specifically, liberals were more likely to believe that there is solid evidence of human-caused climate change than conservatives.

Veenstra et al. (2014) also provided evidence of the role of political identity (i.e., ideology and party identification) in the development of belief gaps about politically contested issues including science-related issues (e.g., climate change and the relationship between vaccinations and autism) and claims about U.S. President Barack Obama. For example, conservatives and

Republicans were more likely to have negative beliefs about Obama (e.g., “President Obama wants to take away Americans’ right to own guns” and “President Obama is a socialist”) than liberals and Democrats. These studies suggest that individuals’ political ideologies play an important role in the formation and distribution of disputed beliefs about contested issues and politics. Therefore, the following hypothesis is proposed:

H1: Political orientations (i.e., ideology and partisanship) are predictors of individuals’ beliefs related to candidates in line with the individuals’ political orientations.

**Social categorization process.** The social categorization process explains how and why individuals’ political orientations may play a key role in the formation of biased beliefs. Beliefs can be activated and formed through a categorization process in which individuals positively perceive themselves as members of an ingroup and have negative perceptions of outgroup members (Tajfel & Turner, 1986). Social categorization, the psychological classification of people into ingroups and outgroups, provides a theoretical mechanism for how people differently perceive ingroup and outgroup members, depending, for example, on whether ingroup or outgroup members perform socially desirable or undesirable behaviors (Maass, Salvi, Arcuri, & Semin, 1989). People tend to have more positive views of ingroup members than outgroup members and are more trusting of ingroup members than members of other groups (Otten & Moskowitz, 2000). In addition, researchers have used the social identity theory to account for the link between partisan media use and polarization. Partisan media use reinforces political group identity by activating positive evaluations of the ingroup and negative evaluations of the outgroup, which in turn leads to greater political polarization (Garrett et al., 2014).

Taken together, the literature indicates that political ideology or partisanship can be used to identify ingroup versus outgroup categorization when it comes to evaluating political matters, including political attitudes and beliefs about political candidates. In other words, the ingroup and outgroup categorization process makes people more likely to accept the views that support their political orientation and more likely to reject the views that are in opposition to their political orientation.

**Partisan media use, beliefs, and voting intention.** People seek out information that accords with their preexisting predispositions based on their political ideologies and partisan views (Garrett, 2009). Exposure to politically slanted media raises important questions in democracies because of its possible effects on citizens’ political attitudes and behaviors (Sunstein, 2007). For this reason, recent studies have begun examining the consequences of citizens’ partisan media use, finding associations between exposure to likeminded information and more polarized attitudes and political participation (Gil de Zúñiga et al., 2012; Stroud, 2011).

Although prior studies have examined the relationship between partisan media use and attitudes toward candidates or attitudinal polarization (Garrett et al., 2014), researchers have given little attention to the consequences of partisan media use on individuals’ beliefs. There’s even less research on how partisan media use influences citizens’ beliefs associated with candidates’ demographic characteristics. Only one previous study has suggested that politically slanted media use is associated with people’s political beliefs about candidates’ race (i.e., Barack Obama’s race) and age (i.e., John McCain’s advanced age; Kim, 2017). The study found that conservatives who consume conservative media tend to perceive that the United States is not ready to elect a Black president and that McCain is not too

old to be president, while liberals consuming liberal media more often are more likely to believe that McCain is too old to be president. However, this study focused on the mediating role of such beliefs and individuals’ knowledge in the relationship between politically likeminded media use and political participation and did not examine how political beliefs would be associated with citizens’ voting behaviors. In addition, other than individuals’ beliefs related to race and age, researchers have not explored whether and how selective exposure can be associated with gender-related beliefs. To fill this gap and add to the literature on the consequences of partisan media use, this study examines the relationship between partisan media use and political beliefs, and further how such gender-related beliefs influence individuals’ voting intention.

Partisan news outlets report political news and information in favor of conservative or liberal perspectives depending on their political orientation, reinforcing the political views of their audience (Jamieson & Cappella, 2008). Partisan media have led citizens to support partisan policies and candidates (Stroud, 2011). Different patterns of partisan media use are known to influence different beliefs about the world of politics. For example, research has shown that viewers of conservative media such as Fox News are more likely to believe that weapons of mass destruction were discovered in Iraq and that evidence of links between Iraq and al Qaeda were confirmed than audiences of liberal media such as NPR and PBS (Kull, Ramsay, & Lewis, 2003). In an election campaign context, partisan news media consist of information favoring their audience’s preferred candidate and negative information about the opposing candidate. Thus, it can be expected that partisan media use may lead people to form positive beliefs about ingroup members (candidates a partisan media outlet is in favor of) and negative perceptions about outgroup members (candidates a partisan media outlet is opposed to). Some research, indeed, has demonstrated that partisan media promotes inaccurate beliefs about outlet-opposed political candidates (Garrett, Long, & Jeong, 2019).

Beyond the direct relationship between media use and beliefs, which prior studies mainly focused on, this study examines whether and how political beliefs are associated with citizens’ voting intention. People use many kinds of heuristics to help make sense of their environments including politics or public affairs (Sniderman, Brody, & Tetlock, 1991), such as party affiliation, ideology, and candidate appearance (Lau & Redlawsk, 2001). Party identification and political ideology play perhaps the most central roles in citizens’ evaluations of candidates (Lau & Redlawsk, 2001). The labeling of social groups, which are frequently presented in news media, plays a causal role in creating individuals’ perceptions or beliefs about certain social groups (Mutz & Goldman, 2010). This can be the case in the relationship between partisan media use and political beliefs associated with political candidates as discussed above. This study argues that such perceptions or beliefs in turn play influential roles in forming individuals’ political attitudes and behaviors because they serve as reference cues for individuals when they process information such as when it comes to deciding whom to vote for. Research demonstrates that some individuals make decisions by using heuristics as substitutes for factual political knowledge (Conover, 1981) and as shortcuts to organize and process enormous amounts of information from various media sources (Caprara & Zimbardo, 2004). For example, stereotypes about female candidates can be used as information shortcuts when voters determine their choices in various election settings (Amalia et al., 2021; Anzia & Bernhard, 2022). Therefore, political beliefs associated with candidates’ demographic characteristics, which might be formed from partisan media use, may also serve

as heuristic cues when people make a decision about whom they will vote for. Based on these discussions and previous studies, the following hypotheses are proposed:

H2: Exposure to partisan media (i.e., liberal media and conservative media) is related to beliefs about a female president in the same direction as political ideology and partisanship.

H3: Beliefs about a female president will be associated with respondents' voting intention toward presidential candidates. That is, beliefs about a female president (i.e., one's perception that their nation is ready to elect a female president) will be positively associated with one's voting intention toward a female presidential candidate and negatively associated with the female candidate's opponent, who is a male candidate.

H4: Beliefs about a female president will mediate the relationship between politically-slanted media use and voting intention toward presidential candidates.

**Overview of studies.** This project included two studies—one from South Korea (Study 1) and one from the U.S. (Study 2). The 2012 Korean presidential election and the 2016 U.S. presidential election provided opportunities to study the relationship between individuals' likeminded media use and their political beliefs related to female candidates. In South Korea's 2012 presidential election, Geunhye Park, the first female presidential candidate in Korean history, ran as the candidate of the Saenuri, a leading conservative party, thus offering an opportunity to examine beliefs about gender's role in politics. In the U.S., Hillary Clinton, the first female candidate to be nominated for president by a major U.S. political party, ran as the Democratic Party's nominee for president of the United States in the 2016 election. Research has shown that media play a significant role in politics and media coverage has placed women at a disadvantage by, for instance, disproportionately reporting on the physical appearances and family lives of female politicians, reinforcing gender stereotypes regarding women (Carroll, 2009). Numerous studies have also shown that such media coverage may be more pronounced if the partisan media's political slant opposes a candidate's political party (Jamieson & Cappella, 2008). Therefore, the direction of beliefs related to candidates (i.e., positive or negative beliefs) may differ depending on whether news media's political slant is conservative or liberal. That is, in Korea, where a female candidate of a conservative party ran for president, it is predicted that liberal media use would be *negatively* related to perceptions of a conservative party's female candidate (e.g., Korea is ready to elect a female president and female politicians are good at handling education and social policies), while conservative media use would be *positively* related to such perceptions. Meanwhile, in the U.S., where a female candidate of the Democratic Party ran for president, it is expected that conservative media use would be *negatively* related to beliefs about female politicians (e.g., the U.S. is ready to elect a female president), while liberal media use would be *positively* related to such perceptions. H1 and H2 were tested, but H3 and H4 were not tested in Study 1 because there were no measures of respondents' voting intention. Study 2 replicates H1 and H2 in the context of the U.S., also testing H3 and H4 given that Study 2 included measures of voting intention toward presidential candidates from Democratic and Republican parties.

### Sample and procedure of Study 1

Study 1 was employed to test H1 and H2. Data for Study 1 came from a national online survey conducted by a professional research company during the Korean presidential campaign in December 2012. Participants were recruited from national online panels maintained by the research company. In order to proportionally represent the Korean population, the research

company employed stratified quota sampling based on gender, age, and region. Survey respondents read an explanation about the survey and participated only if they agreed to take part in the survey. Respondents were free to stop the survey at any time if they wished. The survey design and the procedures were approved by the Institutional Review Board of the University of Alabama. Respondents were asked to report their partisan media use (i.e., *Chosun Ilbo*, *Donga Ilbo*, *Hangyeore*, and *Kyunghyang Shinmun*), beliefs regarding a female presidency, demographics, political orientations, and news media use. Data of the survey were collected from December 11 to December 18, 2012. A total of 526 participants completed the survey.

### Measures

**Beliefs.** As explained above, beliefs in this study are unfalsifiable statements, which are formed based on supposition or even wishful thinking in which there is no consensus about a correct answer upon which to make a judgment (Veenstra et al., 2014). The central dependent variable is the beliefs of respondents regarding a female candidate who ran as a conservative party's presidential candidate. On a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*), the survey asked participants whether they thought Korea was ready to elect a female president ( $M = 4.14$ ,  $SD = 1.76$ ).

**Political ideology.** To measure respondents' political ideology, respondents were asked to place themselves on a scale from 1 (= *very liberal*) to 7 (= *very conservative*) ( $M = 3.78$ ,  $SD = 1.26$ ).<sup>1</sup>

**Partisan media use.** This study measured respondents' frequency of using four news media outlets in Korea: *Chosun Ilbo*, *Donga Ilbo*, *Hangyeore*, and *Kyunghyang Shinmun*. The first two are conservative news media and have the highest circulation in Korea, while the latter two are liberal news outlets. The survey measured use of each news media by asking how frequently respondents used each news outlet on a 7-point scale (1 = *never* to 7 = *very frequently*). The responses for *Chosun Ilbo* and *Donga Ilbo* were averaged for "conservative media" use ( $M = 2.82$ ,  $SD = 1.67$ ,  $r = 0.495$ ,  $p < 0.001$ ), while the responses for *Hangyeore* and *Kyunghyang Shinmun* were averaged for "liberal media" use ( $M = 2.71$ ,  $SD = 1.74$ ,  $r = 0.761$ ,  $p < 0.001$ ).

**Control variables.** Demographics, political orientations, and news media use were included in the analyses (see Table; descriptive statistics are available upon request).

**Results.** Tests of H1 and H2 were undertaken using OLS regression models in which the belief about a female presidency was predicted by sex, age, education, income, political efficacy, political interest, and various media use, as well as the key independent variables—that is, political ideology and politically-slanted media use. Politically-slanted media use variables (i.e., conservative media use and liberal media use) were entered in a second block (Model 2 in Table 1) to know to what extent partisan media use variables independently and additionally explain the belief about a female president. The regression model for Study 1 explained 28.5% of the total variance in beliefs about a female president in which politically-slanted media use variables accounted for 6.3% of the variance in the model. As Model 1 in Table 1 shows, political ideology was a significant predictor of belief ( $\beta = 0.34$ ,  $p < 0.001$ ).

In the model in which partisan media use variables were entered (Model 2), both liberal media use ( $\beta = -0.20$ ,  $p < 0.001$ ) and conservative media use ( $\beta = 0.25$ ,  $p < 0.001$ ) were significant

**Table 1 The effects of political predisposition and partisan media use on beliefs about female presidency (S. Korea case).**

|                        | Model 1 | Model 2  |
|------------------------|---------|----------|
| Controls               |         |          |
| Sex (female)           | 0.10*   | 0.09*    |
| Age                    | 0.15*** | 0.12**   |
| Education              | −0.10*  | −0.10*   |
| Income                 | 0.03    | 0.04     |
| Political efficacy     | 0.05    | 0.09     |
| Campaign interest      | 0.05    | 0.06     |
| TV news                | −0.03   | −0.02    |
| Talk radio             | 0.04    | 0.02     |
| Newspaper              | 0.09*   | 0.01     |
| Online news            | −0.07   | −0.06    |
| Political ideology     | 0.34*** | 0.23***  |
| Partisan media use     |         |          |
| Liberal media use      | −       | −0.20*** |
| Conservative media use | −       | 0.25***  |
| R <sup>2</sup> (%)     | 22.2*** | 28.5***  |

Table entries are final-entry OLS standardized coefficients. \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .  $N = 526$ .

predictors of belief about a female president, even after controlling for individuals' demographic variables (i.e., age, sex, education, and income), political orientations (i.e., political efficacy, political interest, and ideology), and other media use. That is, those who consumed liberal media more often were less likely to believe that Korea was ready to elect a female president, while people consuming conservative media more often were more likely to think that Korea was ready to elect a female president. These findings support H1 and H2.

### Sample and procedure of Study 2

Study 2 presents another test of the effects of political orientations (H1) and exposure to partisan media (H2) on beliefs about a female president in the U.S. context. H3 and H4 were not tested in Study 1 because Study 1 did not include the key variable for H3 and H4: voting intention toward presidential candidates. Extending Study 1, Study 2 also investigates how beliefs about a female president are associated with respondents' voting intention (H3) and the mediating role of the beliefs in the relationship between partisan media use and voting intention toward presidential candidates (H4).

Study 2 used two waves of panel data collected during the 2016 U.S. presidential election campaign period. Qualtrics, a survey company in the United States, collected the data. To improve the representativeness of the results, the survey employed quota sampling to reflect the age, gender, ethnicity/race, education, and household income demographic distribution of the adult U.S. population. Prior to filling out the survey, survey respondents were informed about the study's purpose and asked for their informed consent. The survey design and the procedures were approved by the Institutional Review Board of the University of Alabama. Wave 1 data of the survey were collected between September 27 and October 13, 2016. A total of 1,623 respondents completed the first-wave survey. Wave 2 data of the survey were collected from October 27 to November 8, 2016; 637 participants responded to the second wave, demonstrating a retention rate of 39.2%. The independent variables (i.e., partisan media use—Fox News and CNN) were measured in Wave 1, while the mediating and dependent variables (i.e., beliefs and voting intention, respectively) were measured in Wave 2. Respondents who participated in both Wave 1 and Wave 2 were included in the analysis.

### Measures

**Partisan media use.** Partisan media use is particularly salient in the context of cable news networks in the United States; research has found that Fox News and CNN, in particular, show a pro-conservative and a pro-liberal slant, respectively (Jamieson & Cappella, 2008). This survey measured respondents' levels of exposure to Fox News and CNN in Wave 1. On a 6-point scale (1 = *Never* to 6 = *Everyday*), respondents were asked to report how frequently they used Fox News and CNN to get information and news about politics and elections ( $W^1$  Fox News:  $M = 2.91$ ,  $SD = 1.52$ ;  $W^1$  CNN:  $M = 2.87$ ,  $SD = 1.41$ ).

**Political ideology.** Respondents were asked to indicate their political stands on a 7-point Likert-type scale where 1 = very liberal to 7 = very conservative ( $W^1$   $M = 4.03$ ,  $SD = 1.84$ ).

**Partisanship.** Individuals' partisanship was measured by asking respondents to indicate which of the following they considered themselves to be: Democrat, Closer to Democrat, Independent, Closer to Republican, Republican, or other. Excluding others, responses were recoded with the high value as Republicans ( $W^1$   $M = 2.88$ ,  $SD = 1.44$ ).

**Beliefs.** In line with Study 1's measure of gender perceptions, Study 2 asked the beliefs of respondents regarding a female presidency in the United States, specifically whether they thought the United States was ready to have a woman President. The survey asked respondents to report the extent to which they disagreed or agreed, on a 5-point scale (1 = *strongly disagree* to 5 = *strongly agree*), with the following statement that tapped into beliefs associated with a female candidate in Wave 2: "The United States is ready to have a woman President" ( $W^2$   $M = 3.68$ ,  $SD = 1.27$ ).

**Voting intention.** The central dependent variable was voting intention, measured with a single item on a 5-point scale (1 = *extremely unlikely* to 5 = *very likely*) based on previous research (Schemer, Wirth, & Matthes, 2012). Respondents' voting intentions for the presidential candidates of the Democratic party and the Republican party were asked in Wave 2: Hillary Clinton ( $W^2$   $M = 1.78$ ,  $SD = 2.01$ ) and Donald Trump ( $W^2$   $M = 1.73$ ,  $SD = 1.97$ ), respectively.

**Control variables.** Similar sets of control variables as in Study 1 were measured and included in the analyses (see Table; descriptive statistics are available upon request).

### Results

Table 2 presents the models in which the belief about a female president was predicted by control variables and the key independent variables—political ideology, partisanship, and politically-slanted media use. Demographic variables, news media use, and political orientations were entered in the first block (Model 1) and partisan media use variables were entered in the second block in the regression model (Model 2). The regression model explained 29.5% of the total variance in beliefs about a female presidency. Most importantly, the contributions made by selective likeminded media use to the beliefs were statistically significant. Politically-slanted media use accounted for 2.3% of additional variance in the model.

As predicted, political ideology ( $\beta = -0.11$ ,  $p < 0.05$ ) and partisanship ( $\beta = -0.34$ ,  $p < 0.001$ ) had a significant influence on beliefs about a female presidency (see Model 1 in Table 2). The more strongly participants identified as conservatives and Republicans, the more they tended to reject the notion that the

| Table 2 The effects of political predispositions and partisan media use on beliefs about female presidency (the U.S. case). |                          |                        |
|-----------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------|
|                                                                                                                             | Republicans<br>(Model 1) | Democrats<br>(Model 2) |
| Controls                                                                                                                    |                          |                        |
| Sex (female)                                                                                                                | 0.04                     | 0.04                   |
| Age                                                                                                                         | −0.01                    | 0.01                   |
| Education                                                                                                                   | 0.14**                   | 0.13**                 |
| Income                                                                                                                      | 0.08                     | 0.07                   |
| Political efficacy                                                                                                          | 0.05                     | 0.04                   |
| Campaign interest                                                                                                           | 0.07                     | 0.07                   |
| TV news                                                                                                                     | −0.02                    | −0.04                  |
| Talk radio                                                                                                                  | 0.04                     | 0.04                   |
| Newspaper                                                                                                                   | −0.02                    | −0.03                  |
| Online news                                                                                                                 | 0.03                     | 0.01                   |
| Political ideology                                                                                                          | −0.11*                   | −0.04                  |
| Partisanship                                                                                                                | −0.34***                 | −0.30***               |
| Partisan media use                                                                                                          |                          |                        |
| Liberal media use (CNN)                                                                                                     | −                        | 0.17***                |
| Conservative media use (Fox News)                                                                                           | −                        | −0.15***               |
| R <sup>2</sup> (%)                                                                                                          | 27.2***                  | 29.5***                |

Table entries are final-entry OLS standardized coefficients. \**p* < 0.05; \*\**p* < 0.01; \*\*\**p* < 0.001. *N* = 616

U.S. was ready to elect a female president. Politically-slanted media use variables were entered in a second block of the regression model (Model 2). Results showed that both CNN use ( $\beta = 0.17, p < 0.001$ ) and Fox News use ( $\beta = -0.15, p < 0.001$ ) were significant predictors of belief about a female president, even after controlling for individuals' demographic variables, political orientations, and other news media use. The direction of the influences of CNN use and Fox News use on beliefs were opposite. That is, those who consumed CNN news more often were more likely to believe that the U.S. was ready to elect a female president, while people consuming Fox News more often tended to think that the U.S. was not ready to elect a female president. These results support H1 and H2.

The PROCESS macro was used to test both direct (H3) and indirect (H4) relationships (Hayes, 2013). As presented in Fig. 1, the results showed that beliefs about a female presidency (i.e., one's perception that the U.S. is ready to elect a female president) were positively associated with respondents' voting intention toward Hillary Clinton ( $\beta = 0.15, p < 0.05$ ) and negatively associated with their voting intention toward Donald Trump ( $\beta = -0.25, p < 0.05$ ). Thus, H3 was supported.

H4 states that beliefs about a female president will mediate the relationship between politically-slanted media use and voting intention toward presidential candidates. Table 3 shows the indirect effects of partisan media use (i.e., CNN use and Fox News use) on one's voting intention for Hillary Clinton and Donald Trump through beliefs about a female presidency. The results demonstrated that CNN use was positively associated with beliefs about female presidency, which in turn increased respondents' voting intention for Clinton ( $b = 0.023, SE = 0.010, 95\% CIs = 0.005$  to  $0.045$ ) and decreased voting intention for Trump ( $b = -0.038, SE = 0.015, 95\% CIs = -0.071$  to  $-0.011$ ). Fox News use, in contrast, was negatively associated with beliefs about a female presidency, which in turn decreased respondents' voting intention for Clinton ( $b = -0.019, SE = 0.008, 95\% CIs = -0.038$  to  $-0.004$ ) and increased voting intention for Trump ( $b = 0.031, SE = 0.013, 95\% CIs = 0.008$  to  $0.059$ ). Therefore, H4 was supported.

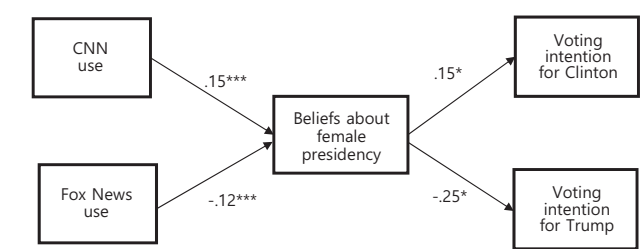


**Fig. 1 Results of PROCESS.** Mediating role of beliefs about female presidency between CNN and Fox News use and voting intention for candidates. \**p* < 0.05; \*\*\**p* < 0.001.

Discussion and conclusion

**Summary of findings.** Using two national survey data sets from South Korea and the United States, this study tested hypotheses regarding the distribution of beliefs about a female presidency—specifically, examining how individuals' political orientations and partisan media use are associated with political beliefs as well as how such beliefs are related to citizens' voting intention. The results of Study 1 from South Korea, where a female candidate ran as a representative of the leading conservative party, showed that political ideology significantly influenced individuals' beliefs. Stronger conservatives were more likely to have positive beliefs about a female presidency—that is, to believe that Korea was ready to elect a female president. Liberals, however, tended to hold the opposite view; they were more likely to have negative perceptions of a female presidency, believing that Korea was not ready to elect a female president.

Study 2 demonstrated similar findings. Given that a female candidate ran as the Democratic Party's presidential candidate in the 2016 US presidential election, stronger liberals were more likely to think that the United States was ready to elect a women president. The stronger participants identified as conservatives, however, the more negative beliefs about a female presidency they held—that is, they were more likely to think that the United States was not ready to elect a woman president. Furthermore, party affiliation showed that stronger Republicans were more likely to have negative beliefs about a female presidency, while stronger Democrats were more likely to have positive beliefs about a female president of the U.S. These findings support the belief gap hypothesis that political predisposition (i.e., partisanship or political ideology) is a better predictor of political beliefs than the level of education for political matters such as contested issues, political candidates, and public policies (Hindman, 2012; Hollander, 2018).

In addition, this study shows a significant role of partisan media use in forming beliefs about a female presidency. Conservative and liberal media use in both South Korea and the United States influences such beliefs in the same direction as political ideology and political partisanship. The results of Study 1 showed that individuals who consumed liberal media more often were more likely to think that Korea is not ready to elect a female president, while those who used conservative media more frequently tended to perceive the opposite given the Conservative Party's female presidential candidate. Study 2 examined gender-related perceptions in the 2016 U.S. presidential election period in which a female politician ran as the Democratic Party's presidential candidate.

As in Study 1, the results from Study 2 demonstrated that partisan media use influenced individuals' beliefs in the same ways. Those who consumed more conservative media (i.e., Fox News) were more likely to have negative beliefs about the Democratic Party's female candidate—that is, to think that the United States was not ready to elect a woman president. Liberal

**Table 3 Mediating role of beliefs about a female president between partisan media use and voting intention for candidates.**

| Path                                         | B      | SE    | Boot 95% CI        |
|----------------------------------------------|--------|-------|--------------------|
| CNN → Beliefs → Voting intention for Clinton | 0.023  | 0.010 | [0.005 to 0.045]   |
| CNN → Beliefs → Voting intention for Trump   | −0.038 | 0.015 | [−0.071 to −0.011] |
| FOX → Beliefs → Voting intention for Clinton | −0.019 | 0.008 | [−0.038 to −0.004] |
| FOX → Beliefs → Voting intention for Trump   | 0.031  | 0.013 | [0.008 to 0.059]   |

Entries are unstandardized regression coefficients. Bootstrap resample = 5000. SE standard errors, CI confidence interval.

media use (i.e., CNN), however, had a significant influence on individuals’ positive beliefs about female politicians, specifically believing that the U.S. was ready to elect a female president. The findings are consistent with previous research showing a significant role of partisan traditional media use in forming beliefs about climate change and Barack Obama—for instance, conservative media use leads people to be less likely to believe that there is solid evidence that the Earth is warming because of human activity and more likely to have negative beliefs about Obama (e.g., Obama is Muslim), while liberal media use demonstrates the formation of such beliefs in the opposite direction (Veenstra et al., 2014). The results of this study, which are replicated across datasets collected in two different countries, further suggest that frequent exposure to politically-slanted media outlets during campaign periods may increase negative beliefs about the outgroup (i.e., partisan media’s opposing candidate) and positive beliefs about the ingroup (i.e., partisan media’s favored candidate), particularly candidates’ gender-related beliefs. These findings are in line with some recent research on the relationship between partisan media use and individuals’ political misperceptions, showing that visits to partisan websites are related to misperceptions consistent with the political bias of the site (Weeks, Menchen-Trevino, Calabrese, Casas, & Wojcieszak, 2021).

**Implications of the study.** The results presented here have important implications for our understanding of the belief gap hypothesis and the role of partisan media in influencing individuals’ beliefs about candidates’ demographic characteristics and voting behaviors. In an effort to expand the scope of the belief gap hypothesis, this study investigated the potential mediating role of beliefs in the relationship between partisan media use and voting intention for the presidential candidates in the U.S., which has not been examined in the current literature. The current findings show that beliefs about a female president are significant predictors of voting intention for both parties’ presidential candidates. The more individuals positively believe the country is ready for a female president, the more likely they are to vote for Hillary Clinton and the less likely they are to vote for Donald Trump, and vice versa if having negative beliefs about a female presidency.

The findings further show that such beliefs play a significant mediating role in the relationship between partisan media use and voting intention for each candidate. Specifically, those who use CNN frequently were more likely to have positive beliefs about a female presidency, which in turn increased voting intention for Hillary Clinton and decreased voting intention for Donald Trump. Fox News use demonstrated the opposite direction. Respondents who consumed Fox News more often were more likely to have negative beliefs about a female presidency in the US, which further increased voting intention for Trump and decreased voting intention for Clinton. These findings highlights the motives of belonging in relation to voting. There are several psychological motives that can be used to explain voter turnout such as civic duty, altruism, and belonging (Bali, Robison, &

Winder, 2020; Macdougall, Feddes, & Doosje, 2020). Given that voting can be a behavior that connects citizens to relevant social groups, such as specific parties or candidates of those parties (Bali et al., 2020), the findings of this study suggest that individuals’ decision to vote can be driven by the motives of belonging (i.e., partisanship and partisan media use), which foster their beliefs.

Overall, findings from both countries provide clear evidence that political predispositions as well as partisan media are associated with political beliefs. This study adds to the growing literature on the belief gap and the consequences of partisan media use. This literature has mainly focused on beliefs about controversial issues and the influence of partisan media on attitudinal polarization and participation (Dilliplane, 2011; Gil de Zúñiga et al., 2012; Hindman, 2012; Hollander, 2018). Although previous studies have shown how political predispositions such as ideology and partisanship and partisan media use influence the distribution of politically disputed beliefs (Hindman, 2009, 2012; Veenstra et al., 2014), few researchers have examined the formation of beliefs about candidates’ demographic characteristics. This study provides empirical evidence that political predispositions and partisan media may influence individuals’ beliefs associated with candidates’ gender.

The findings from Study 1 that liberals believe a woman is unqualified to be a president while conservatives believe a female candidate is well qualified run counter to conventional wisdom about conservative and liberal views of gender-based qualifications. This finding indicates that the social categorization process based on one’s political orientation in a campaign context may play a significant role in reinforcing or even altering individuals’ general perceptions of a specific social group. The findings of this study support the idea that citizens tend to simply accept sets of beliefs or cues about issues/events in partisan media content based on their political predispositions rather than scrutinizing all the facts through the social identification process, which may induce a belief gap between political groups (Hindman, 2009; Price, 1989).

This study makes an additional contribution and even more important contribution to the literature. Beyond the direct influence of political predispositions and partisan media on beliefs, this study also demonstrates mediating pathways through which partisan media use indirectly relates to individuals’ voting intention via beliefs. The extant literature on the belief gap has given little attention to how beliefs are associated with one’s voting intention during the election period. The findings of a mediating role of beliefs in the relationship between partisan media use and voting intention suggest that political beliefs formed through partisan media can act as a heuristic cue when it comes to making political judgments (Domke, 2001; McDermott, 1998).

Another important consideration that warrants mention is that beliefs, measured with questions associated with candidates’ gender, are indirect measures of support and opposition for candidates. In other words, these measures implicitly indicate whether gender should serve as a barrier to being elected. Therefore, the results of this study suggest that partisan media use may produce not only citizens’ biased beliefs about the candidates in line with their political ideologies, but even beliefs about other

social groups depending on one's demographic characteristics such as gender. These implications are consistent with those of previous studies demonstrating that news media influence social judgments or stereotypes regarding various social groups (Dixon, 2008). However, in this context, they appear more compelling in the sense that politically-slanted media use may lead citizens with stereotypical perceptions or prejudices to believe that having a specific social identity (e.g., gender) would serve as a barrier to being elected.

This study is among the first to investigate the links between political predispositions, partisan media use, candidates' gender-related beliefs, and voting intention. As such, it opens up new areas of inquiry, such as how politically slanted media use is associated with people's (biased) beliefs and consequences of such beliefs in political judgments. Researchers have recently started to examine the mechanisms through which politically-slanted media use influences attitudinal polarization. For example, some research has demonstrated that the effect of partisan media use on polarization is mediated through opinion climate perceptions (Tsftati & Chotiner, 2016). That is, the more individuals are exposed to likeminded media, the more they perceive the climate of opinion as consonant with their ideologies, exacerbating attitudinal polarization. The findings that partisan media use contributes to the formation of belief which in turn leads to voting intention provide empirical evidence of the mechanism through which partisan media use influences individuals' political attitudes and behaviors. Once political beliefs associated with candidates have been activated, the enhanced accessibility of beliefs about candidates may influence citizens' attitudes and evaluations of candidates because beliefs related to candidates' demographic characteristics or social identities are likely to be applied in candidate evaluations (Domke, 2001).

**Limitations and future research.** Although the results of the current study clearly extend the belief gap literature, this study has some limitations. While this study's use of a partisan media measure has been validated in many previous studies, some concerns about the measures remain. Such concerns might stem from the fact that not all left-wing or right-wing media outlets (e.g., CNN or MSNBC and Fox News) display overtly left-wing or right-wing slants in their coverage (see e.g., Tsftati, 2016). Therefore, future research could consider an experimental study design that manipulates partisan media to analyze its effects, allowing for an examination of how the use of partisan media influences beliefs related to beliefs about candidates' gender. In addition, Study 1 and Study 2 included in this research are independent, have different numbers of participants, and were conducted in different time frames. Therefore, these two studies cannot be strictly compared, and the data are also somewhat outdated. However, the original purpose of this research was to examine how partisan media use would be associated with beliefs related to the gender of candidates during the 2012 South Korean and 2016 U.S. presidential elections, both of which featured actual female presidential candidates, and to explore whether similar patterns emerged in both countries (i.e., whether generalizable results could be obtained). Nonetheless, future studies could recruit a similar number of participants and design cross-cultural research conducted in more diverse cultures to enable cultural comparisons with more recent data. In addition, considering the limitations of this study, future studies could analyze the characteristics of reporting on female politicians in partisan media used by Korean and American voters and discuss the relationship between the beliefs and voting intentions linked to these messages in both countries. This line of research could further explain the polarization caused by partisan media messages among voters.

## Conclusion

This study analyzed the effect of political orientation and partisan media use on beliefs about female presidential candidates in political campaigns. Specifically, we investigated whether the political orientation and partisan media use of Korean and American voters influence their beliefs about female presidents, and explored whether these beliefs lead to voting intentions. Therefore, we conducted an empirical study focusing on Park Geun Hye, the first female presidential candidate in Korea, nominated in 2012, and Hillary Clinton, the first female presidential candidate of a major political party in the United States, nominated in 2016. We focused on these candidates because the recent Korean female presidential candidate was Park Geun Hye in 2012, and the recent female presidential candidate in the United States was Hillary Clinton in 2016. This study presents empirical results regarding the influence of the political orientation and partisan media use of Korean and American voters on their beliefs about female presidential candidates. We found that the political orientation of voters in both countries and the use of partisan media have an indirect influence on voters' voting intentions through beliefs, which are mediating variables. These are novel findings from our study, not reported in existing literature (Domke, 2001; McDermott, 1998). In other words, this study investigated the relationship between political orientation, partisan media use, gender-related beliefs, and voting intentions in election campaigns, and our results proved that biased media use can lead to the polarization of voter attitudes.

In sum, this study adds empirical evidence to the current literature on beliefs and the consequences of partisan media use. Significantly, this study also provides cross-cultural validation of these relationships, strengthening the generalizability of the relationships examined (except the link between beliefs and voting intention which was investigated only in Study 2). The findings of this study indicate that the influence of one's political predispositions as well as partisan media on political beliefs, which are especially associated with political candidates' demographic characteristics, may be significant in today's polarized and choice-driven media environment. The selection of politically-slanted media outlets may exert a powerful and significant influence in activating political beliefs, which may consequently lead to citizens' political judgments.

## Data availability

All data compiled for this study are available in a supplementary information file.

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## Note

1 Because South Korea has a multiparty system, which makes it difficult to measure individuals' partisanship with a continuous scale (e.g., a 5-point scale where 1 indicates strong Democrat and 5 indicates strong Republican), Study 1 only measured respondents' political ideology.

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## Author contributions

Yonghwan Kim: Data collection, study design, conceptualization, data analysis, writing – original draft Seckjun Jang: Writing – review & editing, conceptualization.

## Competing interests

The authors declare no competing interests.

## Ethical Approval

This research activities were performed in accordance with relevant guidelines and regulations. The questionnaire and methodology for study 1 was approved by the Human Research Ethics committee of the University of Alabama Institutional Review Board (IRB# 12-OR-408). Approval was formally granted on December 19, 2012. Due to the time-sensitive nature of electoral data collection, data collection was initiated while the study was under review by the Institutional Review Board. Ethical approval was subsequently granted with no required modifications to the original protocol, including survey instruments and participant information sheets. No data were accessed, processed, or analysed for research purposes prior to receiving formal approval from the Ethics committee of the University of Alabama Institutional Review Board. And the questionnaire and methodology for study 2 was approved on November 20, 2015 by the Human Research Ethics committee of the University of Alabama Institutional Review Board. The approval number associated with this confirmation is IRB# 15-OR-366. All research activities were performed in accordance with the principles of the Declaration of Helsinki.

## Informed consent

Informed consent for both Study 1 and Study 2 was obtained from all participants prior to data collection via an online consent form. All participants were provided with an information explaining the purpose, procedures, voluntary nature of participation, data confidentiality, and their right to withdraw at any time without penalty. Before accessing the questionnaire, participants were required to read an information sheet and confirm their agreement by selecting a checkbox on the online consent form. Informed consent for Study 1 was obtained from December 11 to December 18, 2012. For Study 2, informed consent was obtained between September 27 and October 13, 2016 (Wave 1), and between October 27 and November 8, 2016 (Wave 2).

## Additional information

**Supplementary information** The online version contains supplementary material available at <https://doi.org/10.1057/s41599-025-05346-1>.

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