# Gendered Ideologies, Gendered Perceptions: Do Nationalist Symbols and Gender Affect People's Perceptions of Politicians?

Patrick Cunha Silva\* Assistant Professor Loyola University Chicago William O'Brochta Assistant Professor Texas Lutheran University

#### Abstract

Politicians and parties employ nationalist symbols to attract public support in elections worldwide. Robust evidence indicates that the public perceives women politicians as more liberal than men politicians. The association between politicians' gender and perceived ideology, combined with the close relationship between nationalism and radical right parties, prompts the question: how do individuals evaluate women politicians when they use nationalist cues? To answer this question, we field a survey experiment in Serbia, a country with a long history of nationalist movements and a digraphic language with one of the alphabets associated with nationalism. Exploiting the Cyrillic alphabet and its association with nationalism, we find that respondents perceive women politicians who use Cyrillic as nationalist than women and men politicians who do not employ Cyrillic. We then show that women and men respondents utilize these cues differently, indicating that the gender of nationalist politicians and members of the public may affect politician evaluations.

Keywords: gender, nationalism, language, politician evaluation, ideology, Eastern Europe, Serbia.

<sup>\*</sup>Corresponding author: Department of Political Science, Loyola University Chicago, 1032 W. Sheridan Road, Chicago, IL 60660. pcunhasilva@luc.edu. We acknowledge financial support from the Department of Political Science at Washington University in St. Louis.

# Gendered Ideologies, Gendered Perceptions: Do Nationalist Symbols and Gender Affect People's Perceptions of Politicians?

Nationalism has re-risen in recent years. What was a fringe movement a few decades ago has gained traction in many regions of the world. Although politicians across the ideological spectrum use nationalist rhetoric, an undeniable association between radical right parties (RRPs) and nationalism exists (Mudde, 2007). Such parties not only employ nationalist rhetoric but are also notorious for their combative approach against gender equality policies and women's rights (Immerzeel, Coffé, and van der Lippe, 2015). Unsurprisingly, women have been systematically less likely than men to support these parties (e.g., Coffé, 2019; Ralph-Morrow, 2022). Recently, RRPs have included more women in their ranks in an attempt to reduce the gender gap and to improve their electoral performance (Weeks et al., 2022). RRPs' strategic move raises the question of how people perceive women politicians when they use nationalist rhetoric and symbols. Are women and men politicians who employ nationalist symbols, such as language, perceived similarly?

We argue that the public primarily uses nationalist cues to evaluate politicians. Similar to how partisan cues are more informative than politician gender (Bauer, 2019; Dolan, 2014; Hayes, 2011), the salience of nationalist discourse in the current political context likely makes it more relevant when evaluating politicians. Nevertheless, previous research has shown that women politicians hold more liberal policy preferences than men. Women politicians in Latin America are more likely to perceive gender inequality as a problem than men (Alexander, Bohigues, and Piscopo, 2022). Studying Europe and Anglo-Saxon countries, de Geus and Shorrocks (2020) show that even women politicians from right-wing parties are less conservative on various policy issues than their men colleagues. Moreover, robust literature on gender stereotypes has shown that members of the public infer that women politicians are more liberal than men (Huddy and Terkildsen, 1993*b*; Koch, 2000*b*, 2002; McDermott, 1997). Therefore, people will use politicians' gender to calibrate their perceptions of nationalism, with women politicians who use nationalist cues being perceived

as less nationalist than men using the same cue.

To test our argument, we field a pre-registered survey experiment in Serbia, a country with a strong nationalist movement and nationalist parties. We leverage the fact that the Serbian language can be written interchangeably in the Cyrillic and Latin alphabets and that Serbians are trained to read both alphabets. More importantly, the Cyrillic script is frequently employed by politicians when talking about nationalist topics like the necessity of preserving Serb heritage, making the use of Cyrillic a nationalist symbol (Ivkovic, 2013; Jovanovic, 2018). Exploiting this feature of the Serbian language, we ask people to evaluate whether politicians would agree with nationalist statements, varying the politician's gender and the alphabet used by the politician. Our results indicate that nationalist symbols drive respondents' evaluations. Respondents perceive a woman politician who uses Cyrillic as more nationalist than either a woman and a man politician who does not use it. Further, respondents perceive a woman politician using Cyrillic and a man politician utilizing Cyrillic as similarly nationalist.

RRPs' attempts to increase the number of women in their ranks motivate us to conduct a secondary analysis where we split our sample by respondent gender to examine whether perceptions of politicians' nationalism vary by respondent gender. Our subsample analysis shows that women respondents view men and women politicians who do not use nationalist symbols similarly but perceive a woman politician who employs them as less nationalist than a man politician utilizing the same symbol. Our findings indicate that language-based cues operate differently depending on the gender of those who use them and those who receive them. Additionally, they suggest that RRPs' efforts to include women in their ranks may modify women's assessments of their politicians. Researchers and members of the public would be wise to carefully consider politicians' messages, evaluating them against candidate demographics, to ensure that messages are interpreted accurately.

### **Gendered Ideologies and Public Perceptions**

Existing literature argues that gender is essential to understanding how people evaluate politicians regarding their competence, issue stances, and ideological positions (Huddy and Terkildsen, 1993*a*; Sanbonmatsu, 2002, 2003; Sanbonmatsu and Dolan, 2009). There are two main theoretical mechanisms that explain people's use of gender: gender-trait and gender-belief stereotypes (Huddy and Terkildsen, 1993*b*). The former emphasizes how gender-linked personality traits drive people's evaluations of politicians, while the latter focuses on the political aspects of gender stereotypes. This second approach is key for our study. According to gender-belief stereotypes, people perceive women as more liberal than men (Huddy and Terkildsen, 1993*b*). This expectation is based on the idea that individuals from different genders pay more attention to certain issues and topics than others. For instance, women, when in office, are thought to be more likely to address issues like equal pay and reproductive rights, which are often seen as "women's issues." As a result, people would tend to perceive women politicians as more liberal than men.

The expectation that women politicians are more liberal than men has empirical support. Women politicians differ from their men counterparts in their policy positions and priorities, with women politicians often revealing preferences for more liberal policies (Lloren and Rosset, 2017). Studies based on surveys of political elites reveal that women politicians are indeed more likely to think favorably of gender equality policies and same-sex marriage compared to men politicians (Alexander, Bohigues, and Piscopo, 2022; de Geus and Shorrocks, 2020). When in office, women are more likely to pursue policies related to gender equality (Barnes, 2016; Crisp and Cunha Silva, 2023; Kweon and Ryan, 2022) and to distribute resources to policy initiatives that aim to promote gender equity and to fight violence against women (Schulze and Hurvitz, 2016). Even though people sometimes overestimate how liberal women politicians are (Koch, 2000*a*) and political knowledge may explain gender stereotypes on issue positions (Sanbonmatsu, 2003), people do perceive that women politicians are more likely to take these pro-liberal stances compared to men politicians (Koch, 2002; McDermott, 1997).

The growth of nationalism in the world, combined with the recent efforts of these movements

to include women in their ranks, makes it essential to extend the work on gender stereotypes and politician evaluations to consider nationalist views. More precisely, given that women politicians are more likely to have pro-liberal stances and people are able to perceive them, how do people evaluate women politicians when they use nationalist symbols?

Nationalism, the idea that beliefs about the nation drive national actions, is often characterized by its close association with masculine traits and male dominance (Deckman and Cassese, 2021; Nagel, 1998). For example, individuals tend to identify their nation with male-dominated features. Studying Americans' perceptions about their country, Van Berkel, Molina, and Mukherjee (2017) find that men and women indicate male-dominated traits (e.g., active and standing up well under pressure) as being more American than female-dominated traits (e.g., honesty and understanding). This relationship between nationalism and masculinity makes it unsurprising that men are more attracted to parties like RRPs that embrace this type of ideology (Ralph-Morrow, 2022), leading to a gender gap in RRP support (Coffé, 2019).

The policies supported by nationalist parties may also explain the gender gap. RRPs frequently adopt conservative social policies closely aligned with traditional values and ideas regarding family and gender roles (Immerzeel, Coffé, and van der Lippe, 2015). For instance, when studying Vox in Spain, Bernardez-Rodal, Rey, and Franco (2022) show that the party often criticizes feminism and gender equality policies, even presenting the idea of a "natural" family as opposed to feminism. Nationalist politicians, like Brazil's Jair Bolsonaro and Hungary's Viktor Orban, often criticize policies that aim to increase gender equality, such as equal pay and abortion access, arguing that the traditional family is at risk and that traditional gender roles should be maintained and protected. In similar ways, in Europe, RRPs frame gender equality as "a dangerous and elitist 'gender ideology,' which challenges traditional family values" (Kantola and Lombardo, 2021, 566).<sup>1</sup> This opposition to gender equality policies and emphasis on traditional gender roles would lead women to equate RRPs to anti-feminism, decreasing women's chances of supporting these parties (Ralph-Morrow, 2022).

The significant gender gap in electoral support has led these parties to try to grow the number

of women in their ranks. Weeks et al. (2022) demonstrate that RRPs, usually described as men's parties due to the fact that they are mostly led, supported, and represented by men, increase their number of women MPs when they are struggling for support and experience a large gender gap. Given that women are more likely to express more liberal positions on cultural dimensions (i.e., same-sex marriage, abortion, and immigration) (Lloren and Rosset, 2017), the inclusion of women in their ranks seems instrumental to these parties to mitigate women's perceptions of them and gain support among this portion of the electorate.<sup>2</sup>

As mentioned, we are interested in how members of the public respond to intersecting gender and nationalist cues. The previous findings on how people utilize gender as an informational cue suggest that, everything held constant, women politicians should be seen as less nationalist than men politicians. At the same time, due to nationalist parties being male-dominated and often against equality policies, the use of a nationalist symbol should make individuals change their ideological perceptions of women politicians. This change could potentially prompt people to perceive women and men politicians as having similar levels of nationalism. There are two main possibilities: either gender identity dominates, such that women politicians are consistently seen as less nationalist than men politicians using nationalist cues are consistently seen as more nationalist than politicians using anti-nationalist cues.

We argue that individuals primarily decide about a politician based on ideological cues, not gender. This argument aligns with work that shows that partisan cues are stronger than gender cues (e.g., Bauer, 2019; Dolan, 2014; Hayes, 2011). While nationalist cues are not entirely informative about partisan membership, the close association between nationalism and RRPs, together with the high visibility of nationalism in current political discourse, suggests that these cues may be strong indicators of ideological positions, similar to partisan cues. However, because women hold more liberal positions in economic and social policies (e.g., Alexander, Bohigues, and Piscopo, 2022; de Geus and Shorrocks, 2020) and the public frequently perceives these stances (e.g., Koch, 2000*b*, 2002; McDermott, 1997), we argue that members of the public use a politician's gender

as a secondary or calibration mechanism. As a result, we expect that people use nationalist cues to identify politicians' levels of nationalism and then consider the politician's gender by reducing women politicians' perceived level of nationalism relative to men politicians who use the same cue. Therefore, nationalist cues should help individuals make primary assessments about politicians' nationalism, whereas gender cues should help them adjust these assessments.

In particular, we investigate nationalist symbols that are unobtrusive and, on their own, are politically irrelevant. Erisen, Lodge, and Taber (2014) demonstrate that unobtrusive cues often affect memory retrieval practices and can inform political attitudes and behavior. There are many such symbols that can take on politically-relevant meaning, including names (Stockmann, Esarey, and Zhang, 2018), pictures (Gangl, Torgler, and Kirchler, 2016), flags (Ariely, 2019), and physical objects (Menga, 2015), among others. As we discuss in the case selection and research design sections, we choose language as a symbol that has no inherent nationalist meaning. But when in a political context, language can serve as an effective nationalist symbol in the Serbian case (Hopkins, 2014; O'Brochta and Cunha Silva, 2022; Perez and Tavits, 2022).

**Hypothesis 1** Women politicians who use nationalist symbols will be evaluated as more nationalist than either men or women politicians who do not use nationalist symbols but as less nationalist than men politicians who use nationalist symbols.

Though we are primarily interested in whether nationalist and gender cues are used together when individuals evaluate politicians' ideological positions, the efforts of RRPs to include women in their ranks suggest that these parties believe that women may react differently to gender cues. If these parties' expectations are correct, women should perceive a larger difference between men and women politicians who utilize nationalist cues. We evaluate this possibility in an exploratory analysis after testing our main hypothesis.

### **Case Selection**

To test our hypothesis, we need to find a context with prominent women politicians who are plausibly nationalist. While nationalism is prevalent worldwide, recent work has focused on nationalism's rise in Europe as part of anti-European Union sentiment (Bieber, 2018). Such sentiment has been particularly pronounced in Central and Eastern Europe and the Balkans, where the combination of economic challenges, longstanding ethnic tensions, and the prospect of continued European integration has fostered increased nationalist rhetoric and support (Enyedi, 2020; Varga, 2021). Sluga (1998) argues that the conception that European nationalism is gendered can be traced back at least to the French Revolution. While this conception has persisted, interviews with women in the midst of ultra-nationalist situations like the Siege of Sarajevo demonstrate that civilian women express nationalist views just as men do (Golubović, 2019).

The Balkans are a very visible place to study nationalism, as images of women fighting during the Bosnian War disrupted traditional gendered conceptions of men as the ones responsible for protecting national identity (Lilly and Irvine, 2002). Indeed, the Serbian government has attempted to redefine nationalism away from the traditional conception of masculinity (e.g., Riabov and Riabova, 2014) and toward "national motherhood" as a way to garner support from women (Bracewell, 1996). Serbian politicians connect gender and nationalism when it is convenient, with Irvine and Lilly (2007) providing examples of parties promoting nationalism as reinforcing traditional gender roles in some instances and allowing for radical equality in others (see also Greenberg, 2006).

Serbia is also a context where both men and women politicians are plausibly nationalists. Serbian President Aleksandar Vučić is well recognized as a nationalist. His Serbian Progressive Party split from the Serbian Radical Party — an ultra-nationalist group whose chief aim was to retake land to create a "Greater Serbia." Vučić's form of nationalism is populist, anti-corruption, and authoritarian. He has, at times, been explicitly anti-European integration, but his current policies seem to promote accession to the European Union. At the same time, he maintains particularly strong ties with Russia. While Vučić no longer declares his interest in creating Greater Serbia, he continues to describe Serbia's loss of Kosovo as an affront to the nation and works to promote his image as the protector of Serbia and Serbian culture.

After being elected president, Vučić proposed Ana Brnabić as Serbian Prime Minister. At the time, Brnabić was not affiliated with a political party; she joined the Serbian Progressive Party in 2019. The extent to which Brnabić has meaningful political power is debatable, which itself reveals Serbia's complex relationship between gender and nationalism (Dević, 2021). She has been seen as both pro-European integration and, more recently, a politician supporting nationalist causes like independence for Republika Srpska — the predominately ethnic Serb entity in Bosnia and Herzegovina (Gotev, 2022; Kljajic, 2021). Brnabić's status as Serbia's most prominent woman politician and her "partially nationalist" stance provides an ideal setting for studying nationalism and gender. Serbians are not wholly unfamiliar with a nationalist woman politician, but at the same time, they are unlikely to assume that all women politicians are nationalist either.

Finally, Serbia is a context where nationalism is clearly connected to a language-based symbol, namely the alphabet. Despite the frequent use of both the Latin and Cyrillic alphabets in many former Communist states, Serbia stands out as a rare context where language is digraphic. Digraphia means that Serbian is fully mutually intelligible in both the Cyrillic and Latin written alphabets (Jaffe, 2012). Serbians learn both the Cyrillic and Latin alphabets in grade school, and adults are equally competent in both alphabets (Havelka, Bowers, and Jankovic, 2006). Both the Serbian Cyrillic and Latin alphabets were developed in the 1800s, and the Cyrillic alphabet has long been used as Serbia's official alphabet. The Cyrillic alphabet is one of the distinguishing features of the Serbian language itself, as Serbian shares many of its grammar and linguistic characteristics with Bosnian and Croatian, both of which are rendered in Latin (Golubovic and Sokolic, 2014; Saric and Felberg, 2017). This distinction became particularly important after the fall of Yugoslavia when Serbian linguists were faced with a choice to either maintain a Serbo-Croatian language, to return to a historical version of Serbian from the 19th century, or to recognize Serbian as the "proper" language to be spoken in what was then still called Yugoslavia (Greenberg, 2008).

The relative uniqueness of Serbian using the Cyrillic alphabet provided an opportunity for na-

tionalists to appropriate the alphabet as a way to convey nationalism. Using the Serbian Cyrillic alphabet has traditionally been associated with strong Serbian nationalism because Cyrillic differentiates Serbian from other languages (Saric and Felberg, 2017). As Jovanovic (2018, 614) states, "Cyrillic script has been transformed into a symbol of nationhood." Ivkovic (2013) supports this finding in a study of alphabet choice in Serbian news website comments, showing that pro-Russian, anti-globalist conservative, and Serbian nationalist websites and commenters use Serbian Cyrillic.

Today, both the Latin and Cyrillic alphabets are commonly used in Serbia. The Serbian Constitution of 2006 adopted Cyrillic as the official alphabet used by the Serbian government, though the government continues to provide Latin versions of most documents. Serbians frequently use Cyrillic and Latin alphabets, and they retain roughly equal status (Spassov, 2012). With the advent of the Internet — where the overwhelming majority of websites are written using the Latin alphabet — use of the Cyrillic alphabet is a particularly strong nationalist signal (Dordevic, 2020).<sup>3</sup>

We conduct our study in Serbia because of the country's longstanding experience with nationalism, women politicians who are plausibly nationalist, and the ability to clearly convey nationalism using a language-based nationalist symbol. Language-based nationalist symbols are used to convey written information in various contexts in Serbia. As a digraphic language, some signs are rendered in both Serbian Cyrillic and Serbian Latin. Many street signs, for example, feature a mix of Serbian Cyrillic and Serbian Latin, sometimes also with English translations included.<sup>4</sup> Newspapers choose whether to publish in Latin or Cyrillic, and newsstands commonly sell papers in both alphabets.<sup>5</sup>

Figure 1 shows how Serbian Cyrillic and Latin are used in signage. The left panel is from a well-known marketing and publicity company in Belgrade. The photo shows the company's name in Serbian Latin, easily recognizable by the Latin "g" in "jugo." The right panel is from a Serbian government memorial to the 1999 NATO bombing of Belgrade. Here, the sign is rendered in both Serbian Cyrillic and English. These photos illustrate the choices that are made to render a sign in either Latin or Cyrillic.

#### [Figure 1 Here]

### **Data and Methods**

We use a pre-registered survey experiment to test our hypothesis where we randomize a politician's gender, the use of a nationalist symbol, and the alphabet used in the survey, keeping their campaign message constant.<sup>6</sup> Our design uses Facebook to recruit Serbian respondents. Facebook provides a good way to recruit participants for several reasons. First, 42% of Serbians use Facebook, making Facebook the third most visited website in Serbia.<sup>7</sup> As a result, Facebook is likely more representative of the Serbian population than are traditional online survey platforms.<sup>8</sup> Second, Serbian politicians make wide use of Facebook. For example, President Vučić and his party were the top-two ad buyers on Facebook between August 4, 2020, and February 5, 2023. Third, Facebook allows us to recruit respondents using ads in Cyrillic and Latin, reducing the chances of recruiting a sample that systematically prefers one script over the other (see ads in Figure 2).

#### [Figure 2 Here]

We recruited participants over a seven-day recruitment period in 2021. In total, we received 1,832 complete responses (50.9% from the Latin ad).<sup>9</sup> Even though our sample does not perfectly resemble Serbia's population, it approximates the population regarding gender, marital status, and ethnicity. Our sample includes a larger percentage of unemployed individuals compared to the population, and, as typical in Internet-based surveys, the sample is younger, more urban, and more educated (see Table 1 for a detailed comparison). Fielding a survey on Facebook results in a non-probability sample (NPS). Therefore, our inferences cannot be generalized to the entire Serbian population, given that it is impossible to know the factors that lead someone to (1) create a Facebook profile and (2) opt-in to answer our survey. Recent work has shown that NPS are still useful in estimating average treatment effects. For example, Mullinix et al. (2015) find that studies using NPS often estimate causal effects similar (in terms of direction, magnitude, and statistical significance) to ones using probability-based samples. The usefulness of NPS is especially highlighted for homogeneous treatment effects like the ones analyzed in our main test (Jerit and Barabas, 2023). Moreover, even in the study of heterogeneous effects, NPS are useful as long as there is

variation in the moderator, which is the case of our sample wherein the number of women and men respondents is roughly balanced.

#### [Table 1 Here]

In the first bloc of questions, respondents answered questions in the alphabet used in the ad that they clicked on. In this pre-treatment section, respondents reported their socio-demographic information, except for ethnicity, which we asked after treatment assignment to avoid priming effects (Klar, Leeper, and Robison, 2020). To evaluate the balance of our sample in terms of alphabet usage and preference, we asked questions about the use of the Cyrillic and Latin alphabets at home and work, whether respondents could speak, read, or write any language other than Serbian, and the importance of preserving the Cyrillic alphabet.

Because of the association of Cyrillic with nationalism in Serbia and multiple studies that show that language may prime survey respondents (see Perez and Tavits, 2018, 2019), we opted to randomize the survey alphabet in the middle of the survey. To do so, we told respondents that a computer algorithm would determine the alphabet used in the second half of the survey. Respondents who entered the survey via the Cyrillic (Latin) ad had a probability of 0.5 of continuing the survey in Cyrillic (Latin) or of changing to a survey in Latin (Cyrillic).<sup>10</sup>

The survey described a politician who would run for office in the 2022 parliamentary election using the slogan "Serbia is not safe; we need to bring the old days back." We based the slogan on rhetoric typically employed by Serbian politicians, including nationalist politicians who emphasize strong law and order ("Serbia is not safe") and a return to the past ("we need to bring the old days back"). We conveyed the information about the politician's gender by varying their name, using the names Milan or Milena, male and female versions of the same Serbian Slavic name.<sup>11</sup> Respondents had the same probability of observing a woman or a man politician. To cue the politician's use of nationalist symbols, we told respondents that the politician would run ads "mostly in [Cyrillic/Latin]." We presented the question-wording in the alphabet used in the survey questionnaire. Thus, respondents should view the alphabet politicians use as a strategic choice. Respondents had the same probability of receiving the treatment (Cyrillic) or the control condition (Latin).

For our dependent variable, we asked respondents how much they think that the politician would agree or disagree (5-point scale) with the following statements, (1) "The world would be a better place if people from other countries were more like Serbians;" (2) "Generally speaking, Serbia is no better than most other countries;" and (3) "Generally, the more influence Serbia has on other nations, the better off they are."<sup>12</sup> We measure perceived nationalism by averaging scores for these three questions.<sup>13</sup>

To estimate the effect of gender plus the use of a nationalist symbol, we follow our pre-analysis plan and estimate a model in which we regress our dependent variable on an indicator for the slogan's alphabet, the politician's gender, and the interaction between both variables. We also control for the alphabet used to recruit respondents and the alphabet used in the survey after the first randomization. The model is written as

$$Y_i = \alpha + \beta_1 \cdot C_i + \beta_2 \cdot W_i + \beta_3 \cdot (C_i \cdot W_i) + \beta_4 \cdot S_i + \beta_5 \cdot A_i + \varepsilon_i, \tag{1}$$

where *Y* is the perceived nationalism measure, *C* is an indicator for the politician's slogan in Cyrillic, *W* is an indicator for a woman politician, *S* is the alphabet in the second part of the survey (Cyrillic), *A* is the Facebook ad's alphabet (Cyrillic), and  $\varepsilon$  is the idiosyncratic error term.

Because our pre-registered hypothesis is about the combined effect of gender and nationalist symbol, we utilize linear hypotheses tests to evaluate our argument. Specifically, we conduct the following tests

$$0 > \beta_2 + \beta_3 \text{ (Man using Cyrillic > Woman using Cyrillic)}$$
  
$$\beta_1 + \beta_2 + \beta_3 > 0 \text{ (Woman using Cyrillic > Man using Latin)}$$
(2)  
$$\beta_1 + \beta_3 > 0 \text{ (Woman using Cyrillic > Woman using Latin)},$$

which is equivalent to saying that we expect that respondents perceive men politicians using a nationalist symbol as more nationalist than women politicians using the same symbol. But, we

expect that women politicians using a nationalist symbol are perceived as more nationalist than either men or women politicians who do not use such a symbol.

### **Results**

Table 2 shows our results from the linear hypothesis tests. A table with estimates from the regression model is available in SI C.

#### [Table 2 Here]

Starting with politicians who use a nationalist symbol, we detect a positive difference in *Perceived Nationalism* in favor of men politicians — respondents perceived a man politician as 0.129 more nationalist (on a 5-point scale). This difference is not statistically significant at p < 0.05 (p = 0.076). Regarding the other two tests, the results support our hypothesis that respondents perceive a woman politician as more nationalist than either man or a woman politician who does not utilize Cyrillic. The estimated differences in *Perceived Nationalism* are equal to 0.172 and 0.232 in favor of a woman politician using Cyrillic. These increases are equivalent to 16.2% and 21.8% of the standard deviation and to 5.95% and 7.99% of the average value of *Perceived Nationalism*. Notably, *Perceived Nationalism* is statistically the same for a man and a woman who does not use Cyrillic ( $\Delta = 0.059$ , p = 0.366) (see SI C). Together, these findings partially support our hypothesis. Respondents mainly utilize nationalist cues when assessing politicians' ideology, with both politicians who use Cyrillic ranked as more nationalist than the others.<sup>14</sup>

#### Are Women and Men Respondents Perceptions the Same?

The gender gap in RRPs' support base — and their recent attempts to reduce such a gap — motivates us to move beyond our pre-registered tests to evaluate whether symbolic and gender cues affect women and men respondents differently. Understanding how individuals perceive politicians is essential because these perceptions will likely affect the effectiveness of RRPs' strategy of including more women in the party ranks. Specifically, if men respondents perceive women politicians as relatively less nationalist, it may lead men to stop supporting parties that increase the number of women politicians. Conversely, if women respondents do not observe a difference between a man and a woman politician who uses a nationalist cue, including women politicians will likely not change the probability that women will support these parties. This subsection provides an initial test for one of the conditions needed to make RRPs' strategy profitable. We hope that this motivates other researchers to continue the analysis of these conditions.

We conduct the subsample analysis by estimating models where we split respondents by gender. Then, we run linear hypothesis tests to compare the effect of gender and symbolic cues within each subsample. Panel (a) of Figure 3 shows that men respondents do not perceive any difference between a woman politician using a nationalist cue and men politicians, independent of the alphabet men use in their slogans. These respondents also do not differentiate between a man politician who employs Cyrillic and one who uses Latin. Additionally, women politicians using Latin are always perceived as less nationalist than men politicians. Combined, these results indicate that nationalist cues do not matter for men when assessing men politicians. Men politicians change when women politicians decide to use a nationalist symbol in their campaign slogan. This leads men respondents to perceive both men and women politicians as equally nationalist.

#### [Figure 3 Here]

Panel (b) in Figure 3 demonstrates that women respondents perceive politicians who do not use a nationalist cue, no matter the politician's gender, as less nationalist than a woman politician using Cyrillic — the difference between women politicians is only significant at p < 0.10 (p = 0.053). Nevertheless, using a nationalist symbol is not enough to make women respondents perceive a woman politician as the same as a man politician using the same cue. Indeed, a man politician using Cyrillic is perceived as 0.204 more nationalist than a woman using Cyrillic, a difference equal to 19.41% of the standard deviation of *Perceived Nationalism* in the sample of women respondents (sd = 1.05). Taken together, our findings indicate that nationalist cues drive public perceptions of politicians. However, men and women respondents react differently to nationalist and gender cues. For men respondents, the use of Cyrillic makes women politicians indistinguishable from men politicians. For women respondents, Cyrillic makes women politicians more nationalist but still less nationalist than men politicians using the same cue.

### **Discussion and Conclusion**

One of the most consistent findings in gender politics is that people perceive women politicians as more liberal than men politicians (Huddy and Terkildsen, 1993*b*; Koch, 2000*b*, 2002; McDermott, 1997). Starting from this established finding, we evaluate whether gender can mitigate the effect of nationalist language-based cues. We find that gender plays an important secondary role in how members of the public assess politicians' nationalism. The prevailing stereotype that nationalist politicians are exclusively men seems to work to counteract the degree to which women politicians using nationalist symbols are seen as nationalists. These gender differences are important because they mean that people misperceive politicians' nationalist views.

We uncover important differences in how men and women respondents utilize these gender and language-based cues. Considering that RRPs strive to include women politicians (Weeks et al., 2022) and that men are already more likely to support nationalist parties (Ralph-Morrow, 2022), our findings suggest that nomination of women by these parties might not reduce the likelihood of men supporting them. Since women are usually more critical of RRPs and their policy positions, nominating women politicians may increase the chances of women casting a ballot for these parties. That is, the nomination may mitigate women's perceptions of the party's attitudes and policies. We invite future research to further evaluate this argument.

Members of the public appear to be using gender and language-based cues as informational shortcuts. When they learn information about a woman politician who uses a nationalist symbol, this goes against prior information and expectations. People update their expectations and associate women politicians using a language-based nationalist symbol as equally nationalist to men politicians using the same symbol. Normatively, this could be seen as a positive result. Languagebased symbols are socially constructed. Politicians, therefore, have a choice whether to employ a symbol or not, and use of a symbol conveys some minimal information about the politician's issue positions. Gender is, likewise, a social construct, but it is easier to switch between using and not using a language-based symbol than it is to redefine gender's social construction. Further, while the use of language-based symbols to signal nationalism is well-known, relatively few women politicians who are nationalist are well-known, so people who consume this information and update their beliefs do so in a way that better reflects reality.

Updating one's beliefs about the association between gender and nationalism does not necessarily imply that women will be more drawn to RRPs if they nominate women candidates. Though women respondents view women politicians using nationalist symbols as less nationalist than men politicians, it is unclear whether this is an advantage for an RRP. While women politicians using nationalist symbols may attract support from some women who had not previously supported an RRP, they may lose support from women who traditionally support RRPs and want strong nationalist candidates. We invite researchers to further investigate the consequences of these findings on the electoral chances of RRPs.

Future research would do well to consider how people respond to politicians' gender and different nationalist cues. The language cue used in this study is particularly appropriate for the Serbian context, but politicians also cue nationalism using a variety of signs, symbols, and slogans whose interpretation may also be influenced by politicians' gender. While we expect that the same theoretical mechanisms operate with other nationalist cues, these cues differ by country, especially in the extent to which they are prevalent in everyday life. Language is a constant, daily feature. We have shown that despite this, respondents pick up on changes in language as nationalist cues. More infrequent exposure to a nationalist cue may produce stronger effects if that cue appears to be novel. Alternatively, rarely used nationalist cues may produce a less clearly defined nationalist signal. We also want to highlight an opportunity to examine intersectionality within the context of evaluating nationalist cues and gender. An overwhelming majority of Serbians identify as Serb, and nationalism is Serbia is a form of ethnic nationalism. In other contexts, however, nationalist and ethnic cues are sufficiently differentiated such that politicians' ethnicity and gender may interact and drive responses to nationalist cues. North Macedonia, with its large ethnic Albanian population and calls by some Albanian politicians to support North Macedonian national identity while other Albanian politicians wish to align more closely with Albania, could be one fruitful context for this type of future research among others. For now though, this study is the first to experimentally demonstrate the impact of politician gender on perceptions of nationalism.

### Acknowledgments

We thank Alexandra Stark, Jennifer Merolla, and Allyson Shortle for their valuable comments. This paper was presented at the 2023 Tulane University Women & Politics Workshop and Writing Retreat.

## **Declaration of Interest**

The authors declare none.

### Notes

<sup>1</sup>It is worth noting that not all RRPs are the same. As Linders, Dudink, and Spierings (2022) show when studying three RRPs in the Netherlands, the role of gender and sexuality in these parties' ideologies is layered, with some parties more concerned about rescuing historical narratives of heroic masculinity and others more focused on hetero-normative family.

<sup>2</sup>Some women politicians may try to establish a nationalist reputation. This is particularly difficult because of the assumption that women politicians are more liberal than men (Rashkova and Zankina, 2017), but those women politicians who are successful are likely to gain prominence because of their relative rarity.

<sup>3</sup>To be clear, not all mentions of the Serbian nation are necessarily rendered in Cyrillic. Rather, Serbian nationalist rhetoric is what is associated with Cyrillic alphabet use.

<sup>4</sup>See for example: https://learningenglish.voanews.com/a/serbia-aims-to-protect-

cyrillic-in-the-age-of-the-internet/4551125.html. Accessed on 02/08/2023.

<sup>5</sup>See for example:https://www.bbc.com/news/world-europe-17912585. Accessed on 02/08/2023.

<sup>6</sup>The experimental protocol was approved by the university Institutional Review Board #202101125 and pre-registered with EGAP.

<sup>7</sup>Based on SimilarWeb data with Google and YouTube as the top two websites. See https: //datareportal.com/reports/digital-2021-serbia. Accessed on 09/08/2021.

<sup>8</sup>Lucid, a commonly used panel service, has only 3% of the total population in Serbia — calculations as of May 10, 2023.

<sup>9</sup>See SI G for more details about compensation and recruitment.

<sup>10</sup>After this randomization, we measured respondents' nationalist attitudes using the same three statements listed below. The results of this randomization are the focus of a separate analysis.

<sup>11</sup>According to Forebears, a private company that tracks family history, Milena is the 47<sup>th</sup>. Milan is the 5<sup>th</sup> most common name in Serbia. See https://forebears.io/serbia/forenames. Accessed on 02/08/2023.

<sup>12</sup>Statements are from Carter and Pérez (2016). We recoded answers to the second statement so that larger values represent stronger nationalist views, like in the other two statements.

<sup>13</sup>As robustness checks, we use a nationalism index based on principal component analysis. The first component accounts for 60% of the variance. Results using the first component are available in SI E. Descriptive statistics are available on SI A.

<sup>14</sup>In SI D, we report results in which we include control variables. The results are similar in terms of substantive and statistical significance to those reported here.

### References

- Alexander, Amy, Asbel Bohigues, and Jennifer M. Piscopo. 2022. "Opening the Attitudinal Black Box: Three Dimensions of Latin American Elites' Attitudes about Gender Equality." *Political Research Quarterly* (October): 106591292211331.
- Ariely, Gal. 2019. "National Days, National Identity, and Collective Memory: Exploring the Impact of Holocaust Day in Israel." *Political Psychology* 40(December): 1391–1406.
- Barnes, Tiffany D. 2016. *Gendering Legislative Behavior: Institutional Constraints and Collaboration.* Cambridge: Cambridge University Press.
- Bauer, Nichole M. 2019. "The Effects of Partisan Trespassing Strategies Across Candidate Sex." *Political Behavior* 41(December): 897–915.
- Bernardez-Rodal, Asuncion, Paula Requeijo Rey, and Yanna G Franco. 2022. "Radical right parties and anti-feminist speech on Instagram: Vox and the 2019 Spanish general election." *Party Politics* 28(March): 272–283.
- Bieber, Florian. 2018. "Is Nationalism on the Rise? Assessing Global Trends." *Ethnopolitics* 17(5): 519–540.
- Bracewell, Wendy. 1996. "Women, Motherhood, and Contemporary Serbian Nationalism." *Women's Studies International Forum* 19(1-2): 25–33.
- Carter, Niambi M., and Efrén O. Pérez. 2016. "Race and Nation: How Racial Hierarchy Shapes National Attachments." *Political Psychology* 37(4): 497–513.
- Coffé, Hilde. 2019. "Gender, gendered personality traits and radical right populist voting." *Politics* 39(May): 170–185.
- Crisp, Brian F., and Patrick Cunha Silva. 2023. "The Role of District Magnitude in When Women Represent Women." *British Journal of Political Science* 53(July): 1061–1069.

- de Geus, Roosmarijn A., and Rosalind Shorrocks. 2020. "Where Do Female Conservatives Stand? A Cross-National Analysis of the Issue Positions and Ideological Placement of Female Right-Wing Candidates." *Journal of Women, Politics & Policy* 41(January): 7–35.
- Deckman, Melissa, and Erin Cassese. 2021. "Gendered Nationalism and the 2016 US Presidential Election: How Party, Class, and Beliefs about Masculinity Shaped Voting Behavior." *Politics & Gender* 17(2): 277–300.
- Dević, Ana. 2021. "Paradoxes of Gender Politics: Nationalism, Patriarchy and the Hijacked Feminism of the New Right in Serbia." *Nationalism and Ethnic Politics* 27(2): 226–245.
- Dolan, Kathleen. 2014. "Gender Stereotypes, Candidate Evaluations, and Voting for Women Candidates: What Really Matters?" *Political Research Quarterly* 67(March): 96–107.
- Dordevic, Nikola. 2020. "Cyrillic in Serbia is on life support, but it's not dead yet." https://emerging-europe.com/after-hours/cyrillic-in-serbia-is-on-life-support-but-its-not-dead-yet.
- Enyedi, Zsolt. 2020. "Right-Wing Authoritarian Innovations in Central and Eastern Europe." *East European Politics* 36(3): 363–377.
- Erisen, Cengiz, Milton Lodge, and Charles S. Taber. 2014. "Affective Contagion in Effortful Political Thinking." *Political Psychology* 35(2): 187–206.
- Gangl, Katharina, Benno Torgler, and Erich Kirchler. 2016. "Patriotism's Impact on Cooperation with the State: An Experimental Study on Tax Compliance." *Political Psychology* 37(6): 867– 881.
- Golubović, Jelena. 2019. ""One Day I Will Tell This to My Daughter": Serb Women, Silence, and the Politics of Victimhood in Sarajevo." *Anthropological Quarterly* 92(4): 1173–1199.

Golubovic, Jelena, and Nikolina Sokolic. 2014. ""Their Language Sounds Aggressive": A

Matched Guise Study with Serbian and Croatian." In *Phonetics in Europe*, ed. Charlotte S. Gooskens, and Renee van Bezooijen. Frankfurt: Peter Lang pp. 35–57.

- Gotev, Georgi. 2022. "EU Regrets Serbian PM Participation in Bosnian Serb Nationalist Extravaganza." https://www.euractiv.com/section/enlargement/news/eu-regrets-serbian-pmparticipation-in-bosnian-serb-nationalist-extravaganza.
- Greenberg, Jessica. 2006. "Nationalism, Masculinity and Multicultural Citizenship in Serbia." *Nationalities Papers* 34(3): 321–341.
- Greenberg, Robert D. 2008. "Language Politics in the Federal Republic of Yugoslavia: The Crisis over the Future of Serbian." *Slavic Review* 59(3): 625–640.
- Havelka, Jelena, Jeffrey S. Bowers, and Dragan Jankovic. 2006. "Cross-Alphabet and Cross-Modal Long-Term Priming in Serbian and English." *Psychonomic Bulletin & Review* 13(October): 842–847.
- Hayes, Danny. 2011. "When Gender and Party Collide: Stereotyping in Candidate Trait Attribution." *Politics & Gender* 7(June): 133–165.
- Hopkins, Daniel J. 2014. "One Language, Two Meanings: Partisanship and Responses to Spanish." *Political Communication* 31(July): 421–445.
- Huddy, Leonie, and Nayda Terkildsen. 1993a. "The Consequences of Gender Stereotypes for Women Candidates at Different Levels and Types of Office." *Political Research Quarterly* 46(3): 503–525.
- Huddy, Leonie, and Nayda Terkildsen. 1993b. "Gender Stereotypes and the Perception of Male and Female Candidates." *American Journal of Political Science* 37(1): 119–147.
- Immerzeel, Tim, Hilde Coffé, and Tanja van der Lippe. 2015. "Explaining the gender gap in radical right voting: A cross-national investigation in 12 Western European countries." *Comparative European Politics* 13(February): 263–286.

- Irvine, Jill A., and Carol S. Lilly. 2007. "Boys Must Be Boys: Gender and the Serbian Radical Party, 1991–2000." *Nationalities Papers* 35(1): 93–120.
- Ivkovic, Dejan. 2013. "Pragmatics Meets Ideology: Digraphia and Non-Standard Orthographic Practices in Serbian Online News Forums." *Journal of Language and Politics* 12(October): 335– 356.
- Jaffe, Alexandra. 2012. Orthography as Social Action: Scripts, Spelling, Identity, and Power. Berlin: De Gruyter.
- Jerit, Jennifer, and Jason Barabas. 2023. "Are Nonprobability Surveys Fit for Purpose?" *Public Opinion Quarterly* 87(November): 816–840.
- Jovanovic, Srdan Mladenov. 2018. "Assertive Discourse and Folk Linguistics: Serbian Nationalist Discourse about the Cyrillic Script in the 21st Century." *Language Policy* 17(November): 611–631.
- Kantola, Johanna, and Emanuela Lombardo. 2021. "Strategies of right populists in opposing gender equality in a polarized European Parliament." *International Political Science Review* 42(November): 565–579.
- Klar, Samara, Thomas Leeper, and Joshua Robison. 2020. "Studying Identities with Experiments: Weighing the Risk of Posttreatment Bias Against Priming Effects." *Journal of Experimental Political Science* 7(1): 56–60.
- Kljajic, Sanja. 2021. "Brnabic: A Female Leader Who Is Unlikely to Change History." https://www.dw.com/en/ana-brnabic-a-female-leader-who-is-unlikely-to-change-history/a-56850681.
- Koch, J. W. 2000*a*. "Do citizens apply gender stereotypes to infer candidates' ideological orientations?" *Journal of Politics* 62(May): 414–429.

- Koch, Jeffrey W. 2000b. "Do Citizens Apply Gender Stereotypes to Infer Candidates' Ideological Orientations?" *The Journal of Politics* 62(May): 414–429.
- Koch, Jeffrey W. 2002. "Gender Stereotypes and Citizens' Impressions of House Candidates' Ideological Orientations." *American Journal of Political Science* 46(April): 453–462.
- Kweon, Yesola, and Josh M. Ryan. 2022. "Electoral Systems and the Substantive Representation of Marginalized Groups: Evidence from Women's Issue Bills in South Korea." *Political Research Quarterly* 75(December): 1065–1078.
- Lilly, Carol S., and Jill A. Irvine. 2002. "Negotiating Interests: Women and Nationalism in Serbia and Croatia, 1990-1997." *East European Politics & Societies* 16(1): 109–144.
- Linders, Nik, Stefan Dudink, and Niels Spierings. 2022. "Masculinity and Sexuality in Populist Radical Right Leadership." *Politics & Gender* (September): 1–22.
- Lloren, Anouk, and Jan Rosset. 2017. "Gendered policy preferences? Candidates' views on political issues in a comparative perspective." *Comparative European Politics* 15(October): 944–968.
- McDermott, Monika L. 1997. "Voting Cues in Low-Information Elections: Candidate Gender as a Social Information Variable in Contemporary United States Elections." *American Journal of Political Science* 41(January): 270–283.
- Menga, Filippo. 2015. "Building a Nation through a Dam: The Case of Rogun in Tajikistan." *Nationalities Papers* 43(3): 479–494.
- Mudde, Cas. 2007. *Populist Radical Right Parties in Europe*. 1st edition ed. Cambridge, UK ; New York: Cambridge University Press.
- Mullinix, Kevin J., Thomas J. Leeper, James N. Druckman, and Jeremy Freese. 2015. "The Generalizability of Survey Experiments." *Journal of Experimental Political Science* 2(2): 109–138.
- Nagel, Joane. 1998. "Masculinity and nationalism: gender and sexuality in the making of nations." *Ethnic and Racial Studies* 21(January): 242–269.

- O'Brochta, William, and Patrick Cunha Silva. 2022. How Do the Nationalists Write? Language Cues and Perceptions of Nationalism. In *Midwest Political Science Association Annual Conference*. Chicago: .
- Perez, Efren, and Margit Tavits. 2022. Voicing politics: How language shapes public opinion. New York: Princeton University Press.
- Perez, Efren O., and Margit Tavits. 2018. "Language Heightens the Political Salience of Ethnic Divisions." *Journal of Experimental Political Science* OnlineFirst(November): 1–10.
- Perez, Efren O., and Margit Tavits. 2019. "Language Influences Public Attitudes toward Gender Equality." *The Journal of Politics* 81(January): 81–93.
- Ralph-Morrow, Elizabeth. 2022. "The Right Men: How Masculinity Explains the Radical Right Gender Gap." *Political Studies* 70(February): 26–44.
- Rashkova, Ekaterina R., and Emilia Zankina. 2017. "Are (Populist) Radical Right Parties Mannerparteien? Evidence from Bulgaria." *West European Politics* 40(July): 848–868.
- Riabov, Oleg, and Tatiana Riabova. 2014. "The Remasculinization of Russia?: Gender, Nationalism, and the Legitimation of Power Under Vladimir Putin." *Problems of Post-Communism* 61(2): 23–35.
- Sanbonmatsu, Kira. 2002. "Gender Stereotypes and Vote Choice." *American Journal of Political Science* 46(1): 20–34.
- Sanbonmatsu, Kira. 2003. "Political Knowledge and Gender Stereotypes." *American Politics Research* 31(November): 575–594.
- Sanbonmatsu, Kira, and Kathleen Dolan. 2009. "Do Gender Stereotypes Transcend Party?" *Political Research Quarterly* 62(September): 485–494.
- Saric, Ljiljana, and Tatjana Radanovic Felberg. 2017. "Cyrillic Does Not Kill: Symbols, Identity, and Memory in Croatian Public Discourse." *Druzboslovne Razprave* 85: 51–71.

- Schulze, Corina, and Jared Hurvitz. 2016. "The Dynamics of Earmark Requests for the Women and Men of the US House of Representatives." *Journal of Women, Politics & Policy* 37(January): 68–86.
- Sluga, Glenda. 1998. "Identity, Gender, and the History of European Nations and Nationalisms." *Nations and Nationalism* 4(1): 87–111.
- Spassov, Orlin. 2012. "Contesting Bulgaria's Past Through New Media: Latin, Cyrillic and Politics." *Europe-Asia Studies* 64(October): 1486–1504.
- Stockmann, Daniela, Ashley Esarey, and Jie Zhang. 2018. "Who Is Afraid of the Chinese State? Evidence Calling into Question Political Fear as an Explanation for Overreporting of Political Trust." *Political Psychology* 39(5): 1105–1121.
- Van Berkel, Laura, Ludwin E. Molina, and Sahana Mukherjee. 2017. "Gender Asymmetry in the Construction of American National Identity." *Psychology of Women Quarterly* 41(September): 352–367.
- Varga, Mihai. 2021. "The Return of Economic Nationalism to East Central Europe: Right-wing Intellectual Milieus and Anti-liberal Resentment." *Nations and Nationalism* 27(1): 206–222.
- Weeks, Ana Catalano, Bonnie M. Meguid, Miki Caul Kittilson, and Hilde Coffé. 2022. "When Do Männerparteien Elect Women? Radical Right Populist Parties and Strategic Descriptive Representation." *American Political Science Review* (March): 1–18.

Variable	Survey (%)	Population (%)
Gender = Women	53.71	51.70
Education = College	57.75	16.00
Age = 18-35	22.11	29.51
Age = 36-49	33.24	23.50
Age = 50-64	36.63	26.70
Age = 65 +	8.02	20.29
Marital status = Married	50.76	55.10
Unemployed	17.19	9.08
Urban	68.34	56.70
Ethnicity = Serbian	80.56	83.30

Table 1: Survey Characteristics v. Population Characteristics

*Sources*: Gender (2011 Census), Ethnicity (2011 Census), Age (2011 Census), Marital status (2011 Census), Education (2011 Census), Unemployed (The World Bank, 2020), Urban (CIA, The World Factbook, April 2020).

*Note:* Age categories differ slightly in our survey and those available in the Serbian Statistical Yearbook. Specifically, the entries show the following comparisons: 18-35 (our survey) v. 15-34 (2011 Census), 36-49 (our survey) v. 35-49 (2011 Census), 50-64 (our survey) v. 50-64 (2011 Census), and +65 (our survey) v. +65 (2011 Census)

Table 2: Difference in People's Perception of Politicians Regarding Nationalism Depending on Politician'sGender and Use of Nationalist Symbol

Linear Hypothesis Test	Estimated Difference
Man Using Cyrillic – Woman Using Cyrillic	0.129 (0.076)
Woman Using Cyrillic – Man Using Latin	0.172* (0.072)
Woman Using Cyrillic – Woman Using Latin	0.232*** (0.069)

#### Figure 1: Signs in Serbian Latin and Serbian Cyrillic



*Note*: Serbian Latin sign is for a business in Belgrade. The Serbian Cyrillic sign is part of a government exhibit commemorating the 1999 NATO air strikes on Belgrade. Both photos taken by the authors.

#### Figure 2: Facebook Ads used to Recruit Respondents



(a) Latin Alphabet

(b) Cyrillic Alphabet

#### Figure 3: Differences in Average Treatment Effects for Gender and Script on People's Perception of Politicians Regarding Nationalism, Subsamples



(b) Only Women Respondents

(a) Only Men Respondents

Note: Point estimates are the differences in perceived nationalism. 95% confidence intervals using HC2 robust standard errors. Linear hypothesis tests based on the estimated coefficients reported in Table C.1 (column 2 for panel a and column 3 for panel b). Tables C.3 and C.4 report results from linear hypothesis tests.

### **Figure Captions**

- Figure 1: Signs in Serbian Latin and Serbian Cyrillic
- Figure 2: Facebook Ads Used to Recruit Respondents
- Figure 3: Differences in Average Treatment Effects for Gender and Script on People's Perception of Politicians Regarding Nationalism, Subsamples

# Supplemental Information: Gendered Ideologies, Gendered Perceptions

A	Survey Descriptive Statistics	1
B	Randomization Checks	2
С	Full Results	4
D	Models including Control Variables	6
E	Alternative Dependent Variable: Main Analysis	8
F	Experimental Design	10
G	Ethical Principles	10

# A Survey Descriptive Statistics

Statistic	N	Mean	St. Dev.	Min	Max
Slogan Language = Cyrillic	1,832	0.508	0.500	0	1
Politician Gender = Woman	1,832	0.492	0.500	0	1
Survey Language = Cyrillic	1,832	0.504	0.500	0	1
Ad Language = Cyrillic	1,832	0.491	0.500	0	1
Perceived Nationalism	1,832	2.904	1.064	1.000	5.000
Perceived Nationalism - PCA	1,832	-0.000	1.349	-2.038	2.502
Gender = Woman	1,832	0.537	0.499	0	1
Gender = Man	1,832	0.454	0.498	0	1
Gender = No Response	1,832	0.009	0.093	0	1
Education = College	1,832	0.578	0.494	0	1
Age = 18-35	1,832	0.221	0.415	0	1
Age = 36-49	1,832	0.332	0.471	0	1
Age = 50-64	1,832	0.366	0.482	0	1
Age = $65 +$	1,832	0.080	0.272	0	1
Marital status = Married	1,832	0.508	0.500	0	1
Unemployed	1,832	0.172	0.377	0	1
Urban	1,832	0.683	0.465	0	1
# of languages spoken = $0$	1,832	0.117	0.321	0	1
# of languages spoken = 1	1,832	0.472	0.499	0	1
# of languages spoken = $2$	1,832	0.259	0.438	0	1
# of languages spoken $> 2$	1,832	0.152	0.359	0	1
Use of Cyrillic-Latin (at home)	1,832	-0.596	2.208	-4	4
Use of Cyrillic-Latin (at work)	1,832	-0.551	2.356	-4	4
Importance of Cyrillic	1,832	4.059	1.201	1	5
Serbian	1,832	0.806	0.396	0	1
Party = SNS	1,832	0.110	0.313	0	1
Knows the # of MPs	1,832	0.686	0.464	0	1
Knows the presidential term length	1,832	0.407	0.491	0	1
Interest in politics	1,832	3.622	1.334	1	5

#### Table A.1: Descriptive Statistics

### **B** Randomization Checks

Figure B.1 shows the p-values for the difference in means tests used to evaluate whether our randomization worked for the treatment (politician's gender). As we can observe, all the p-values are larger than  $\alpha = 0.05$ .



Figure B.1: Randomization Checks for Politician's Gender

*Note:* Dots represent p-values from a difference in means tests. Vertical dashed lines represent  $\alpha = 0.05$ , and  $\alpha = 0.10$ .

Figure B.2 shows the p-values from difference-in-means tests used to evaluate whether our randomization worked for the alphabet used in the slogan. Except for *Importance of Cyrillic*, all the p-values are larger than  $\alpha = 0.05$ . Even though we detect an imbalance in this variable, the results in SI D show that our findings are robust to the inclusion of this control in our models.



Figure B.2: Randomization Checks for Cyrillic Slogan

*Note:* Dots represent p-values from a difference in means tests. Vertical dashed lines represent  $\alpha = 0.01$  and  $\alpha = 0.05$ .

## C Full Results

	Perceived Nationalism		
	Full Sample	Men Respondents	Women Respondents
	(1)	(2)	(3)
Slogan Alphabet = Cyrillic	0.303*** (0.070)	0.133 (0.108)	0.455*** (0.093)
Politician's Gender = Woman	-0.059(0.066)	-0.227* (0.102)	0.068 (0.087)
Slogan Alphabet = Cyrillic	-0.001 (0.049)	0.032 (0.075)	-0.046 (0.066)
x Politician's Gender = Woman			
Survey Alphabet = Cyrillic	0.091 (0.049)	0.040 (0.075)	0.156* (0.068)
Survey Ad = Cyrillic	-0.071 (0.098)	0.186 (0.149)	-0.273* (0.133)
Constant	2.752*** (0.058)	2.832*** (0.094)	2.700*** (0.075)
Ν	1,832	832	984
$R^2$	0.020	0.018	0.034
Adjusted R <sup>2</sup>	0.018	0.012	0.029

Table C.1: Gender and Script on People's Perception of Politicians Regarding Nationalism

*Note:* Point estimates are the differences in average treatment effects computed using the OLS estimator. Robust standard errors (HC2) are in parentheses. \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001

Table C.2: Linear Hypothesis Tests Based on Model 1	1 from Table A.1 (Full Sample)
---	--------------------------------

Linear Hypothesis Test	Estimated Difference in Perceived Nationalism
Man using Cyrillic – Woman using Cyrillic	0.129 (0.073)
Man using Latin – Woman using Cyrillic	$-0.172^{*}$ (0.072)
Woman using Latin – Woman using Cyrillic	-0.232*** (0.069)
Woman using Latin – Man using Cyrillic	-0.362*** (0.067)
Woman using Latin – Man using Latin	-0.059(0.065)
Man using Cyrillic – Man using Latin	0.302*** (0.070)

Linear Hypothesis Test	Estimated Difference in Perceived Nationalism
Man using Cyrillic – Woman using Cyrillic	0.041 (0.108)
Man using Latin – Woman using Cyrillic	-0.091 (0.111)
Woman using Latin – Woman using Cyrillic	-0.318** (0.102)
Woman using Latin – Man using Cyrillic	-0.360*** (0.098)
Woman using Latin – Man using Latin	$-0.227^{*}$ (0.101)
Man using Cyrillic – Man using Latin	0.132 (0.107)

Table C.3: Linear Hypothesis Tests Based on Model 2 from Table A.1 (Men Respondents)

*Note:* Table's entries estimates are the differences in respondents' perception of politicians. Robust standard errors (HC2) are in parentheses. \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001

Table C.4: Linear Hypothesis Tests Based on Model 3 from Table A.1 (Women Respondents)

Linear Hypothesis Test	Estimated Difference in Perceived Nationalism
Man using Cyrillic – Woman using Cyrillic	0.204* (0.100)
Man using Latin – Woman using Cyrillic	-0.251*** (0.095)
Woman using Latin – Woman using Cyrillic	-0.182(0.094)
Woman using Latin – Man using Cyrillic	$-0.386^{***}$ (0.091)
Woman using Latin – Man using Latin	-0.068(0.086)
Man using Cyrillic – Man using Latin	0.455*** (0.093)

## **D** Models including Control Variables

		Perceived Nationalis	
	Full Sample	Men Respondents	Women Respondents
	(1)	(2)	(3)
Slogan Alphabet = Cyrillic	0.316*** (0.068)	0.155 (0.105)	0.427*** (0.090)
Politician's Gender = Woman	-0.057(0.065)	-0.236* (0.099)	0.053 (0.087)
Slogan Alphabet = Cyrillic x Politician's Gender = Woman	-0.077 (0.097)	0.177 (0.145)	-0.225 (0.131)
Survey Alphabet = Cyrillic	0.003 (0.048)	0.042 (0.073)	-0.034(0.064)
Survey Ad = Cyrillic	0.021 (0.054)	-0.070(0.081)	0.077 (0.073)
Gender = Man	$-0.120^{*}$ (0.051)		× /
Gender = No Response	-0.196 (0.273)		
Education = College	0.085 (0.054)	0.004 (0.082)	0.147* (0.073)
Age = 36-49	-0.133(0.075)	-0.152(0.111)	-0.124 (0.105)
Age = 50-64	-0.241** (0.076)	-0.189 (0.119)	-0.281** (0.103)
Age = 65+	$-0.337^{***}$ (0.098)	$-0.372^{**}$ (0.142)	$-0.332^{*}(0.143)$
Marital status = Married	-0.218*** (0.051)	-0.245** (0.083)	-0.218** (0.067)
Unemployed	-0.034 (0.072)	-0.076 (0.106)	0.014 (0.102)
Urban	0.068 (0.052)	0.150 (0.080)	-0.011 (0.070)
# of languages spoken = 1	0.003 (0.077)	-0.056 (0.130)	0.018 (0.098)
# of languages spoken = 2	-0.004 (0.083)	-0.136 (0.138)	0.085 (0.106)
# of languages spoken $> 2$	0.243* (0.100)	0.107 (0.163)	0.328* (0.130)
Use of Cyrillic-Latin (at home)	0.021 (0.017)	0.035 (0.025)	0.009 (0.024)
Use of Cyrillic-Latin (at work)	-0.005 (0.015)	-0.019 (0.022)	0.008 (0.022)
Importance of Cyrillic	0.003 (0.025)	0.030 (0.037)	-0.026 (0.034)
Knows the # of MPs	0.149** (0.055)	0.297** (0.092)	0.072 (0.071)
Knows the presidential term length	-0.055 (0.054)	0.009 (0.083)	-0.119 (0.074)
Interest in politics	0.069*** (0.019)	0.055 (0.030)	0.080** (0.025)
Constant	2.644*** (0.155)	2.548*** (0.243)	2.693*** (0.205)
N	1,832	832	984
R <sup>2</sup>	0.075	0.080	0.096
Adjusted R <sup>2</sup>	0.063	0.056	0.077

Table D.1: Gender and Script on People's Perception of Politicians Regarding Nationalism - With Controls

*Note:* Point estimates are the differences in average treatment effects computed using the OLS estimator. Robust standard errors (HC2) are in parentheses. \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001

Table D.2: Linear Hypothesis Tests Based on Model 1 from Table D.1 - Full Sample

Test	Difference in Perceived Nationalism
Man using Cyrillic – Woman using Cyrillic	0.133 (0.072)
Man using Latin – Woman using Cyrillic	$-0.182^{*}$ (0.071)
Woman using Latin – Woman using Cyrillic	-0.239*** (0.068)
Woman using Latin – Man using Cyrillic	-0.373*** (0.065)
Woman using Latin – Man using Latin	-0.057(0.064)
Man using Cyrillic – Man using Latin	0.316*** (0.068)

*Note:* Table's entries estimates are the differences in respondents' perception of politicians. Robust standard errors (HC2) are in parentheses. \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001

Table D.3: Linear Hypothesis Tests Based on Model 2 from Table D.1 - Men Respondents

Test	Difference in Perceived Nationalism
Man using Cyrillic – Woman using Cyrillic	0.059 (0.108)
Man using Latin – Woman using Cyrillic	-0.096 (0.108)
Woman using Latin – Woman using Cyrillic	-0.332*** (0.100)
Woman using Latin – Man using Cyrillic	-0.391*** (0.098)
Woman using Latin – Man using Latin	-0.236* (0.098)
Man using Cyrillic – Man using Latin	0.155 (0.105)

*Note:* Table's entries estimates are the differences in respondents' perception of politicians. Robust standard errors (HC2) are in parentheses. \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001

Table D.4: Linear Hypothesis Tests Based on Model 3 from Table D.1 - Women Respondents

Test	Difference in Perceived Nationalism
Man using Cyrillic – Woman using Cyrillic	0.171 (0.097)
Man using Latin – Woman using Cyrillic	-0.255** (0.094)
Woman using Latin – Woman using Cyrillic	-0.201* (0.095)
Woman using Latin – Man using Cyrillic	-0.373*** (0.089)
Woman using Latin – Man using Latin	0.053 (0.087)
Man using Cyrillic – Man using Latin	0.426*** (0.089)

## **E** Alternative Dependent Variable: Main Analysis

Table E.1: Gender and Script on People's Perception of Politicians Regarding Nationalism—PCA First Component

	Perceived Nationalism		
	Full Sample	Men Respondents	Women Respondents
Slogan Alphabet = Cyrillic	0.364*** (0.089)	0.162 (0.136)	0.530*** (0.119)
Politician's Gender = Woman	-0.059(0.084)	-0.259* (0.131)	0.081 (0.110)
Slogan Alphabet = Cyrillic	0.026 (0.063)	0.028 (0.094)	0.005 (0.085)
x Politician's Gender = Woman			
Survey Alphabet = Cyrillic	0.098 (0.063)	0.055 (0.094)	0.150 (0.087)
Survey Ad = Cyrillic	-0.103 (0.125)	0.195 (0.188)	-0.313 (0.170)
Constant	-0.192** (0.074)	-0.075 (0.120)	-0.267** (0.094)
Ν	1,832	832	984
R <sup>2</sup>	0.017	0.015	0.027
Adjusted R <sup>2</sup>	0.015	0.009	0.022

*Note:* Point estimates are the differences in average treatment effects computed using the OLS estimator. Robust standard errors (HC2) are in parentheses. \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001

	Table E.2: Linear Hypothesis	Tests Based on	Model 1 from	Table E.1 -	Full Sample
--	------------------------------	----------------	--------------	-------------	-------------

Test	Difference in Perceived Nationalism
Man using Cyrillic – Woman using Cyrillic	0.162 (0.092)
Man using Latin – Woman using Cyrillic	-0.201* (0.090)
Woman using Latin – Woman using Cyrillic	$-0.260^{***}$ (0.088)
Woman using Latin – Man using Cyrillic	-0.423*** (0.086)
Woman using Latin – Man using Latin	-0.059(0.083)
Man using Cyrillic – Man using Latin	0.364*** (0.088)

Table E.3: Linear Hypothesis Tests Based on Model 2 from Table E.1 - Men Respondents

Test	Difference in Perceived Nationalism
Man using Cyrillic – Woman using Cyrillic	0.063 (0.134)
Man using Latin – Woman using Cyrillic	-0.098(0.138)
Woman using Latin – Woman using Cyrillic	-0.357** (0.128)
Woman using Latin – Man using Cyrillic	$-0.420^{***}$ (0.125)
Woman using Latin – Man using Latin	-0.258* (0.130)
Man using Cyrillic – Man using Latin	0.162 (0.136)

*Note:* Table's entries estimates are the differences in respondents' perception of politicians. Robust standard errors (HC2) are in parentheses. \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001

Table E.4: Linear Hypothesis Tests Based on Model 3 from Table E.3 - Women Respondents

Test	Difference in Perceived Nationalism
Man using Cyrillic – Woman using Cyrillic	0.232 (0.129)
Man using Latin – Woman using Cyrillic	-0.297* (0.121)
Woman using Latin – Woman using Cyrillic	-0.216 (0.121)
Woman using Latin – Man using Cyrillic	$-0.449^{***}$ (0.118)
Woman using Latin – Man using Latin	0.080 (0.110)
Man using Cyrillic – Man using Latin	0.529*** (0.119)

### F Experimental Design





### **G** Ethical Principles

As explained in the body of the paper, we utilized Facebook ads to recruit respondents. The ads invited Facebook users to participate in an academic study. Specifically, the ads (available in Figure 2) read, "Researchers from Washington University in St. Louis are looking for citizens of Serbia to participate in a five-minute anonymous online survey about politics. Win a gift card (5,000.00 RSD) for your participation to eklik.rs, wolt, tickets.rs, or Airserbia." These are major companies in Serbia from which we bought the gift cards.

The description of the public Facebook page used by the authors to run the ads also explained that the page was dedicated to an academic study. Specifically, the description reads, "We are researchers from Washington University in St. Louis who are looking for citizens of Serbia to participate in a five-minute anonymous online survey about Serbian politics. Your responses will be anonymous and stored on a secure, password-protected server. In this survey, we are interested in your personal opinion, there are no right or wrong answers, and the survey does not ask for any information that could identify you personally. At the end of the survey, you will have the option to enter to win a gift card. This research is being conducted by researchers of the Department of Political Science at Washington University in St. Louis. If you have any questions about the research, please feel free to contact us at [email address] or [email address]." After clicking on the ad, respondents received similar information. Respondents gave consent by clicking on advance after reading the first page of the survey questionnaire.

After closing the field, we drew the eight gift cards valued at RSD 5,000.00 ( $\approx$ \$50.00) each to compensate the participants. This resulted in an estimated compensation (for a survey completion time of 5 minutes) equal to more than double the minimum wage in Serbia in 2021 when the survey was fielded.

The research did not intervene in political processes and did not involve deception. The survey and the research design were evaluated by a country expert in order to avoid potential risks to respondents as part of the IRB review process. Both the country expert and the IRB concluded that the study did not present any risks to respondents and potential respondents.