The Elusive Measurement of Symbolic Effects on Citizens’ Political Attitudes: Survey Experiments as Alternative Avenues

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Abstract
In examining what the presence of female politicians symbolize to citizens, especially to women, scholars have sought to empirically prove whether it enhances the legitimacy of, closeness to and satisfaction with political institutions, as well as levels of political efficacy and participation. By taking stock of the burgeoning quantitative research examining the symbolic effects of women’s descriptive representation on citizens’ political attitudes and behavior, we will discuss the main empirical and methodological challenges that may have led scholars to reach at best mixed results, to identify merely modest effects or to not find any trace of them. These challenges include difficulties in properly establishing the causal effects and in operationalizing the dependent variable as well as a dearth of adequate data. Our contribution discusses the advantages provided by new methodological avenues, such as survey experiments vis-à-vis standard public opinion surveys, to circumvent the shortcomings identified.

Keywords
women’s symbolic representation; women’s descriptive representation; survey experiments; causal inference; political attitudes and behavior
Women politicians become a *symbol* arguably by evoking two powerful ideas to citizens, namely that women are just as capable of governing as men and that the political system is inclusive of all social groups (Mansbridge 1999). The *audience* is then the people observing and reacting to increasing numbers of women in politics. Within the gender and politics literature, scholars have sought to empirically prove whether women politicians might instil a role model effect upon female citizens (Reingold and Harrell 2010) thereby increasing the latter’s levels of political efficacy, competency, and participation. Scholars have also examined whether the presence of female politicians enhances citizens’ attitudes toward the legitimacy of, closeness to, and satisfaction with political institutions (High-Pippert and Cromer 1998; Lawless 2004). Therefore, from this perspective, symbolic representation is not considered to be a dimension on its own right but rather the *by-product* of descriptive representation. In other words, the symbolic effects on both political engagement and system evaluation rest on women’s numerical presence.

In this contribution we reflect on the empirical and methodological challenges that may have led scholars to reach at best mixed results, to identify merely modest causal relationships or to not find any trace of them. We also discuss the opportunities that survey experiments set up for testing the existence of such causal effects as well as for unfolding the underlying causal mechanism(s). We conclude by calling gender and politics scholars to diversify their research strategies in order to provide better answers to the questions underpinning symbolic representation.

**Empirical and methodological challenges**

Extant quantitative research on symbolic representation has failed to reach conclusive results for the existence of symbolic effects instilled by increases in women’s representation. Taking stock of the burgeoning scholarship in this field, which usually draws on public opinion surveys, we outline the main empirical and methodological challenges underpinning the study of the symbolic value of descriptive representation, more specifically causal inference problems, the operationalization of the dependent variable, and data limitations. These challenges warrant serious attention for the evaluation of symbolic effects on citizens’ political attitudes and behavior.

Firstly, concerning data limitations, standard public opinion surveys tend to lack relevant variables to undertake a successful study on symbolic representation. In general, these surveys include a limited number of suitable independent variables, be it legitimacy of, closeness to, and satisfaction with political institutions or levels of political efficacy, competency, and
participation. More importantly, most surveys do not include any or enough questions that would allow linking – either directly or indirectly – descriptive representation with symbolic representation. As a result, existing surveys do not enable to identify the causal mechanism(s) underlying the expected symbolic effects brought about by women’s numerical presence in political institutions.

Secondly, the operationalization of the dependent variable — women’s presence in political positions — is by no means straightforward: when to set the cut-off point and where – which institutions – to examine it. Most studies use either cross-sectional or single-case data and segment the analysis into one period in which political representation was strongly skewed towards men (i) and another one in which proportions are more equilibrated or even gender-balanced (i+1). However, cut-off points are only clear where reforms in the electoral system such as the adoption of electoral quotas have enacted change overnight, with incremental progress being more common. Selecting the political institutions where women’s presence occurs posits another dilemma. To what extent might the gradual feminization of parliament produce symbolic effects, such as a role-model effect, on citizens living in a town governed by a female mayor? Countries with a strongly masculinized parliament but where women have served as prime ministers or presidents present a similar conundrum. Some scholars have clustered all institutions together, but this strategy still fails to identify who instilled the effect and when it started (see, for example, Reingold and Harrell 2010). Furthermore, extant studies have not proven that citizens are aware of the gender composition of political institutions, an assumption that should itself be problematized.

Thirdly, studies on women’s symbolic representation are riddled with causal inference problems (see Schwindt-Bayer and Mishler 2005). As noted by Wolbrecht and Campbell (2007, 927), “what appears to be an effect of the presence of female MPs may actually be the effect of a political or social context that facilitates both female representation and women’s political activity” (see also York and Bell 2014). Besides the risk of spurious correlations, the existence of reverse causation between women’s representation and the particular symbolic effect(s) under examination along with reciprocal effects cannot be discarded (Stockemer and Byrne 2012). In other words, variation in the percentage of women in parliaments and changes in female citizens’ beliefs in their ability to govern may be part of a virtuous cycle where both variables are mutually reinforced (Alexander 2012, 446). Also, while a low gender gap in political engagement might well lead to a higher presence of women in political power, increases in women’s presence may also stir women’s political engagement.
Survey experiments as alternative avenues

Alternatives to standard public opinion surveys in quantitative research on symbolic representation include longitudinal and panel studies (Mariani et al. 2015; Uhlaner and Scola 2015) and quasi-natural experiments (Bhavnani 2009; Clayton 2015). These research designs help to solve some of the shortcomings discussed above but their expansion is limited, with longitudinal surveys including enough relevant questions being scarce and quasi-natural experiments being rare events. We argue that survey experiments are a fruitful alternative avenue. Despite having mushroomed in political science research over the past few years, this methodological approach is still rather limited among gender and politics scholars. In the field of women’s political representation, survey experiments have mainly looked at the pervasiveness of negative stereotypes in evaluating women candidates and politicians (see, among others, Streb et al. 2008; Schneider and Boss 2014). Our browsing of the literature on symbolic representation has only identified two works using this type of surveys (Wolak 2015; Verge, Espírito-Santo and Wiesehomeier 2015).

In survey experiments, to infer how public opinion works, the form or placement of survey items is manipulated and respondents are randomly assigned to control and treatment conditions or stimuli (cf. Gaines et al. 2007, 3–4). Survey experiments, which may or may not rely on nationally representative population samples, include various techniques such as list experiments, item count technique, conjoint analysis, vignettes, and different forms of framing and priming. Besides their relatively low cost, especially when using internet-based interviewing, these surveys are particularly well suited for dealing with sensitive social topics that may otherwise be subject to social desirability issues, such as gender equality issues (Streb et al. 2008). Most importantly, they are extremely useful to overcome the empirical and methodological limitations discussed above.

The advantages of survey experiments in terms of data collection are straightforward. Since they are designed to test a specific hypothesis or a small set of hypotheses, the key treatments and relevant questions are invariably included. Also, while observational studies require a large number of questions to rule out spurious relationships (Mutz 2011, 18), an experimental design requires fewer questions. Survey experiments also allow overcoming limitations affecting the operationalization of the dependent variable. Through the random assignment of respondents to treatments, the researcher controls the stimuli each individual is exposed to. While one may argue that survey experiments face contamination from the real world – for example, that respondents’ prior exposure to levels of women in politics in the real world might interfere with the treatment – most researchers assume that if no systematic differences
between the control and treatment sub-samples are found, observed variance in responses are caused by the stimuli (Gaines et al. 2007, 10–17). Most importantly, the use of survey experiments is particularly recommended to tackle causal effects as well as to unfold their direction and the underlying mechanism (Mutz 2011, 15). Vignette treatments seem to be a particularly useful technique for studying symbolic representation. Using words, pictures or both, vignettes allow “to evaluate what difference it makes when the actual object of study or judgment, or the context in which that object appears, is systematically changed in some way” (Mutz 2011, 118). This technique thus relies on framing by leading individuals to focus on particular considerations when forming their opinion (Druckman 2001). It is precisely framing through vignettes the technique used in the two existing survey experiments run in the field of symbolic representation.

Wolak (2015) departs from problematizing the fact that engendered political engagement may not just be based on candidate gender but rather on a wide range of factors that cannot be controlled for in standard public opinion surveys, including variance in candidate’s self-presentation, type of media coverage or differentiated routes to political office by women and men candidates. By holding candidate traits and campaign information constant for a special election contest (an open congressional seat), Wolak investigates the link between candidate gender and respondents’ vote intention and their feelings of political efficacy. Respondents are assigned to four treatments, using different vignettes (in the form of a newspaper article) about a race between two female candidates, two male candidates, a Democrat man and a Republican woman, and a Republican man and a Democrat woman. After reading the article, respondents are asked about their probability to vote in this election, which candidate they would vote for, and their feelings of political efficacy. Wolak’s results contradict the general expectation that women will be more politically engaged with more feminized political competition.

On the other hand, Verge, Espírito-Santo and Wiesehomeir (2015) examine whether exposure to distinct vignettes about greater women’s representation and its concomitant effects has an impact on citizens’ political engagement and on their evaluation of the political system. In this case, the authors are not interested in measuring symbolic effects per se but rather in identifying the causal mechanism. The stimuli to which respondents are randomly assigned consist of vignettes emphasizing positive and negative effects of women’s increasing levels in political institutions concerning changes in the way in which politics works, female politicians’ competency, and the promotion of women’s interests. A control group receives no treatment. These vignettes also adopt the form of a newspaper article that precedes the
questions of interest – those related to political engagement and evaluation of the political system. The results suggest that framing women’s representation and the outcomes of their presence in particular ways shape symbolic effects with regards to how citizens evaluate the political system but do not affect their political engagement.

It should be noted that, for survey experiments to be effective and produce reliable results, the stimuli must be perceived as posing a credible – and not merely hypothetical – situation (Druckman 2001, 1042). Likewise, adequate control variables must be included to enable attributing the effect to the stimuli and sampling issues need to be taken into account. For identifying causes and effects, socially representative samples of respondents are not always needed, but the use of university student samples, while cheaper, lacks external validity – i.e. might not allow generalizing the findings (Mutz 2011, 57). Lastly, survey experiments may present ethical issues that need to be adequately tackled by researchers – e.g. debriefing respondents when using deception.

**Conclusions**

Several layers of factors separate women’s numerical presence from citizens’ political attitudes and behavior. Given that gender is only one of the many characteristics of politicians, who simultaneously integrate complex political and social systems, it is reasonable to expect modest impacts. However, in tracing such symbolic effects, paying attention to empirical and methodological issues is crucial. As has been argued, survey experiments present several advantages vis-à-vis standard surveys for quantitative analyses of women’s symbolic representation. The virtues of this innovative exploration make a strong case for the use of multiple methods by gender and politics scholars whose selection should be advocated on the grounds of their effectiveness in addressing their research questions.

**References**


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