

# The Unequal Representation of Social Groups in Democracies

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## Abstract

How well are different social groups represented by political elites in democracies? We propose a new measure of group-specific ideological representation, which we term the ‘relative opinion presence’ of a social group, with several attractive properties. We employ this measure to compare the extent of unequal representation on three separate cleavages: gender, age, and education. We find evidence of inequalities in ideological representation based on gender, but not age or education. Second, we find that the opinions of marginalized citizens are generally better represented by in-group candidates. Third, we find that these inequalities are smaller under proportional representation. Our findings reaffirm that, on multiple cleavages, improvements in descriptive representation are likely to have a significant impact on the quality of substantive representation as well.

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# 1 Introduction

In the eyes of scholars and citizens alike, the quality of electoral representation in a democratic polity is central to its performance and its legitimacy. What effective representation should look like in a well-functioning democracy is still debated, and scholars have consequently evaluated its quality using a range of outcomes, including policy responsiveness (Soroka and Wlezien, 2010; Gilens, 2012; Elsässer, Hense and Schäfer, 2021), pledge fulfillment (Stokes, 2001; Matthieß, 2020) or retrospective voting (Powell and Whitten, 1993; Hobolt, Tilley and Banducci, 2013; Healy and Malhotra, 2009). Failures of representation on these and related criteria do not only compromise the attainment of political equality in these systems, but have also been linked to declining democratic satisfaction (Mayne and Hakhverdian, 2017; Arnesen and Peters, 2018), as well as the rise of extreme-right and populist parties in several consolidated democracies (Halikiopoulou and Vasilopoulou, 2018; Castanho Silva and Wratil, 2023). As such, evaluating the quality of representation in democracies and exploring its determinants remains an important enterprise.

In this paper, building on a long and established research tradition, we return to the question of how different democracies perform in terms of producing ideological congruence between citizens and political elites (Huber and Powell, 1994; McDonald, Mendes and Budge, 2004; Blais and Bodet, 2006; Golder and Stramski, 2010; Powell, 2019).<sup>1</sup> Within this extensive literature, the extent to which ideological congruence generally prevails, as well as when it is more likely to prevail, remains debated (McDonald and Budge, 2005; Golder and Lloyd, 2014; Warwick, 2016; Powell, 2019). At the same time, this literature has repeatedly documented the existence of persistent and substantial inequalities in ideological congruence, with the policy preferences of less affluent and less

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<sup>1</sup>This is distinct from a concern with *policy responsiveness*, which is a dynamic process (Soroka and Wlezien, 2010; Gilens, 2012; Elsässer, Hense and Schäfer, 2021). By contrast, ideological congruence refers to the similarity between the policy preferences of all or some citizens, on the one hand, and elite preferences or actions, on the other hand – a static conception and measure of representation.

educated citizens – and to a lesser extent, those of women – receiving disproportionately little representation from political elites. This tendency was first observed in the United States (Bartels, 2008; Gilens, 2012), but a growing body of work has also identified similar patterns in numerous other European and Latin American democracies (Giger, Rosset and Bernauer, 2012; Bernauer, Giger and Rosset, 2015; Schakel and Hakhverdian, 2018; Rosset and Stecker, 2019; Elsässer, Hense and Schäfer, 2021; Lupu and Warner, 2022; Persson and Sundell, 2023).

We revisit this question with a new measure of group-specific ideological congruence that is both straightforward to calculate and easy to interpret: the ‘relative opinion presence’ of different social groups. This measure captures the extent to which the opinions of a particular social group are over- or under-represented among members of the political elite relative to the size of that group within the electorate. We operationalize this measure by combining data on the preferences of electoral candidates drawn from multiple elite surveys with data on citizen preferences drawn from multiple mass surveys. Our final analysis is based on survey responses from approximately 35,000 elite and 700,000 citizen respondents, spread across 161 country-years, 4 continents, 25 countries and 22 years – a broader geographical and temporal focus than in much of this literature.<sup>2</sup>

Further, rather than focusing on a single cleavage, we characterize and compare the extent to which citizens are unequally represented on three separate cleavages: gender, education and age. As such, this represents an additional contribution of our paper. Most of the literature on this topic has focused on unequal representation based on aspects of social class (wealth, income, education), and very few have considered the extent of unequal representation based on multiple cleavages.<sup>3</sup> To our knowledge, no study has

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<sup>2</sup>Most studies focus on single countries, or on European democracies. The comprehensive analysis of patterns in ideological congruence across the globe conducted by Lupu and Warner (2022) represents a notable and important exception. However, they only consider inequalities based on social class (or affluence), whereas we study inequalities based on multiple cleavages.

<sup>3</sup>For instance, Schakel and Hakhverdian (2018) and Rosset and Stecker (2019) take into account both income and education, while Bernauer, Giger and Rosset (2015) consider gender and income.

previously attempted to compare the extent of unequal representation based on more than two cleavages, as we do here. Moreover, by examining patterns of unequal representation based on age and education, we turn the spotlight on two relatively understudied cleavages, which have nonetheless been the subject of an emerging literature (Hakhverdian, 2015; Rosset and Stecker, 2019; O’Grady, 2022; Castanho Silva, 2024).

We also use this measure to study the implications of improved descriptive representation for citizens’ substantive representation, while better accounting for preference heterogeneity among citizens *and* politicians than most prior work on this topic. A large prior literature has found that improvements in the descriptive representation of marginalized groups has implications for political decision-making – and in a direction consistent with what we either believe, or observe, the majority of that group to prefer (Kittilson, 2008; Volden, Wiseman and Wittmar, 2018; Carnes and Lupu, 2015; O’Grady, 2019; Alexiadou, 2022). However, these and most other studies base their analysis on the policies they either assume or observe the majority of these groups to prefer, requiring us to assume uniform preferences or interests among members of marginalized groups – something which many researchers have previously criticized (Phillips, 1995; Kroeber, 2018a). The difficulties are immediately apparent when we recall, for instance, that many women oppose feminist policies such as liberal abortion rights or extensive childcare policies (Celis and Childs, 2012).

Our empirical strategy allows us to address this concern. This is because, since we rely on elite (candidate) surveys to operationalize our measure of ideological congruence, we are able to directly compare the distribution of group members’ preferences with the distribution of in-group candidate preferences. This contrasts with the work discussed above, which typically does not directly measure the preferences of the groups concerned. It also advances on prior research on the impact of descriptive representation on ideological congruence between marginalized citizens and elites, which has mainly relied

on expert surveys to measure elite preferences (Kroeber, 2018b; Dingler, Kroeber and Fortin-Rittberger, 2019). However, these expert surveys only contain information on the ideological location of individual political parties – and thus do not permit analysis of the preferences of in-group candidates more specifically.<sup>4</sup> Thus, to the best of our knowledge, ours is the first study to directly compare the preferences of citizens belonging to a marginalized social group to the preferences of politicians who also belong to that group.

Our analysis reveals statistically significant inequalities in ideological congruence by gender, but not by age or education. That is, we find that the opinions of women are under-represented by electoral candidates relative to those of men, but we do not find evidence that the views of less educated voters, or of younger and older voters, are under-represented by electoral candidates relative to the views of more educated voters, or middle-aged voters. At the same time, we find that – even after the heterogeneous preferences of these groups are accounted for – women and less educated voters are better represented by in-group candidates than they are by men or university-educated candidates. By comparison, we do not find evidence that younger and older voters are better represented by candidates of a similar age than they are by middle-aged individuals<sup>5</sup> – potentially a consequence of the lower political salience of age. These findings suggest that, at least on gender and education, improved descriptive representation is likely to improve the quality of substantive representation as well.

Finally, we also use our approach to revisit the ‘ideological congruence controversy’ (Huber and Powell, 1994; Powell, 2009; Golder and Stramski, 2010) – or the debate on the effect of electoral rules on ideological congruence between citizens and representatives.

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<sup>4</sup>We are aware of only one other study that implements a similar approach to study the representation of Dutch voters by representatives from a similar educational background – based on an original survey of Dutch local politicians (Hakhverdian, 2015). However, our study substantially expands on this focus both geographically and in terms of the cleavages considered.

<sup>5</sup>In our data, middle-aged citizens (aged 40 to 60) are typically over-represented among candidates – that is, a majority of candidates are typically middle-aged, but only a minority of voters. Meanwhile, younger and older citizens are typically under-represented among candidates relative to their prevalence in the electorate.

While early work on this topic argued that proportional representation (PR) was more likely to produce a close ideological correspondence between citizens and their elected government (Huber and Powell, 1994; Powell, 2000, 2009), more recent work has found that PR has no such advantage (Blais and Bodet, 2006; Golder and Stramski, 2010; Golder and Lloyd, 2014). We find that, if the representation of minority opinions by electoral candidates is considered instead, PR still retains some slight advantage over majoritarian systems. In particular, minority opinions receive about 2.5% less representation by candidates in majoritarian systems than they do under PR. However, as our focus is earlier in the ‘chain of delegation’ (Mueller, 2000) than these aforementioned studies, our results are consistent with the finding that PR systems produce ‘better and more consistent representation in the legislature’ (Golder and Lloyd, 2014, 201) – even if (due to the process by which governing coalitions are formed) this does not translate into improved ideological representation by governments.

The rest of the paper is organized as follows. Section 2 introduces our measure of group-specific ideological congruence – the relative opinion presence of different social groups – and describes the data that we use to operationalize this measure. Section 3 presents and discusses the results from our initial analyses. Section 4 concludes.

## **2 Data and Methodology**

### **2.1 Measuring Relative Opinion Presence**

In this paper, we aim to assess the extent to which the opinions of different social groups divided by a particular cleavage receive unequal representation from political elites – and in particular, from electoral candidates. To this end, we propose a new measure of group-specific ideological congruence: the ‘relative opinion presence’ of a social group. Our measure captures the extent to which the opinions of a typical member of a social group

are over- or under-represented by candidates relative to the opinions of a typical voter in the electorate. Then, this provides an indication of how over- or under-represented members of a social group are relative to their prevalence in the electorate as a whole.

Consider a society  $G$  constituted by several social groups  $j$ , where each group  $j$  has  $N_j$  members. Each member of the social group  $j$  has an opinion  $i \in \{1 \dots n\}$ , and the number of members of group  $j$  with the opinion  $i$  is given by  $N_{i,j}$ . The electorate is made up of all members of all groups  $j \in G$  with all opinions  $i$ , containing  $N = \sum_j \sum_i N_{i,j}$  individuals. The number of individuals with opinion  $i$  is then given by  $N_i$ .

Further, suppose there are  $K$  candidates who potentially represent members of this society, with each candidate  $k$  representing an opinion  $i$ . Let  $K_i$  denote the number of candidates representing the opinion  $i$ . Furthermore, let  $q_i$  denote the number of candidates representing the typical individual with opinion  $i$ . That is,

$$q_i = \frac{K_i}{N_i}$$

where an opinion group is e.g. voters who place themselves at ‘2’ on the left-right scale. The members of each opinion group, numbering  $N_i$  in total, may be drawn from multiple social groups  $j$ .

The number of candidates representing a typical member of group  $j$  is then given by

$$Q_j = \sum_i \frac{q_i \times N_{i,j}}{N_j}$$

Let  $\bar{q}$  represent the average value of  $q_i$  across all voters. That is, the average number of candidates representing a typical voter irrespective of their opinion. Then,

$$\bar{q} = \frac{K}{N} = \sum_i \frac{q_i \times N_i}{N} = \sum_j \frac{Q_j \times N_j}{N}$$

The relative opinion presence  $p_i$  of an opinion group  $i$  in this society is given by:

$$p_i = \frac{q_i}{\bar{q}} = \frac{K_i/K}{N_i/N} = \frac{\text{fraction of candidates with opinion } i}{\text{fraction of voters with opinion } i} \quad (1)$$

The quantity  $p_i$  therefore captures the number of candidates representing each voter who has the opinion  $i$ , relative to the number of candidates representing the average voter. The larger this number, the better is that opinion group represented by candidates.

The relative opinion presence  $P_j$  of a social group  $j \in G$  is then given by

$$\begin{aligned} P_j &= \frac{Q_j}{\bar{q}} \\ &= \sum_{i=1}^n p_i \times \text{fraction of social group } j \text{ with opinion } i \end{aligned} \quad (2)$$

It is immediate that this quantity captures the number of candidates representing the typical member of group  $j$  *relative to the number of candidates representing the typical voter overall*. Mechanically, the average value of  $P_j$ , weighted by group size, must equal 1. When the relative opinion presence a group has is below 1, its opinions are under-represented by candidates relative to the size of the group in the electorate. Conversely, when it is above 1, the group is over-represented by candidates relative to its numbers.<sup>6</sup> On the other hand, if the relative opinion presence of a group is exactly 1, this means that members of that social group are as well represented by candidates as the typical voter (which may not be very well at all).

We can extend the above reasoning straightforwardly to also study the relative opinion presence of a social group  $j$  among in-group candidates.

First, we calculate the relative communicative presence  $p_i^j$  of opinion group  $i$  among legislators belonging to social group  $j$  as follows:

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<sup>6</sup>As an example, if we calculate that high education voters have a relative opinion presence of 1.48, this means that the opinions of high education voters receive 48% more representation by candidates than does the opinions of the typical voter.



$$p_i^j = \frac{\text{fraction of candidates in group } j \text{ with opinion } i}{\text{fraction of voters with opinion } i} \quad (3)$$

Then, the relative opinion presence  $P_j^j$  of a social group  $j$  among in-group candidates is given by:

$$P_j^j = \sum_i p_i^j \times \text{fraction of social group } j \text{ with opinion } i$$

Our measures relate closely to measures of distributional (many-to-many) congruence already employed in existing work on ideological congruence (Golder and Stramski, 2010; Lupu, Selios and Warner, 2017) and on unequal representation based on income, education and gender (Giger, Rosset and Bernauer, 2012; Bernauer, Giger and Rosset, 2015; Lupu and Warner, 2022). As compared with earlier approaches – which compared, for instance, the (stated) preferences of the median voter and the median legislator in a polity (Huber and Powell, 1994; McDonald, Mendes and Budge, 2004) – these measures better capture the extent to which minority views (including within minority groups) are represented by political actors, an important criterion for effective representation according to many democratic theorists. However, compared to these earlier approaches, our measure is very straightforward to calculate, and so can easily be applied to study the representation of a large number of social groups, and in a large number of countries and years. It can also be straightforwardly interpreted to evaluate the *relative* political representation of different social groups – something which earlier measures did not seek to capture.

However, it is important to note that we cannot infer the overall level of distributional congruence in a system from this measure. For example, if the opinions of voters do not vary systematically by social group, the relative opinion presence of all social groups within a cleavage may be close to 1 but the overall distributional congruence low.

However, if overall distributional congruence in a system is sufficiently high, no social group can have a relative opinion presence that is very different from 1.

## 2.2 Data and Empirical Strategy

We operationalize these measures by combining data on the preferences of electoral candidates from multiple waves of the Comparative Candidate Survey and the British Representation Study with data on citizen preferences from multiple waves of the Comparative Study of Electoral Systems and Eurobarometer survey series.

Following Lupu and Warner (2022), we match each elite survey to multiple mass surveys, based on mass surveys fielded in that country in each year of the legislative term covered by the elite survey. This means that, for instance, a politician surveyed in 2017 who was running for election to a parliament that lasted from 2017 to 2019 is matched to citizen respondents for mass surveys fielded in 2017, 2018 and 2019.<sup>7</sup> As in Lupu and Warner (2022), we restrict attention to one elite survey per country-year, but pool observations across mass surveys fielded in the same year. This is because, unlike with elite data, the probability of overlapping samples in mass surveys fielded in the same year is minimal. Our final dataset consists of 35,193 elite and 688,719 citizen observations, spread across 161 country-years, 4 continents, 25 countries and 22 years (1997-2019). Additional information on our coverage and the sources we utilise for each country-year is given in Appendix A.<sup>8</sup>

These surveys all include information on the left-right self-placement of both citizens

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<sup>7</sup>This applies, for instance, to candidates surveyed in the UK for Module 2 of the Comparative Candidate Survey, who were competing in the 2017 election.

<sup>8</sup>A concern with reliance on elite surveys is non-response bias, or the extent to which elite samples are representative of the population of electoral candidates as a whole (Laver, 2014, 214). If, for instance, candidates who are more left-wing are more likely to respond to elite surveys, then our measure of the distribution of left-right opinion among candidates will be biased. However, previous research relying on similar surveys has not found evidence of systematic non-response bias among respondents (Saeigh, 2009; Fisher and Harris, 2013; Byrne and Theakston, 2016; Lupu and Warner, 2022).

and candidates, as well as on some of their demographic characteristics.<sup>9</sup> In particular, these surveys also typically contain information on the gender, educational qualifications and age of citizens and candidates. Based on this information, we distinguished respondents identifying as male and female; respondents with some and no university education; and respondents of an age below 40 (young), between 40 and 60 (middle-aged), and above 60 (old).<sup>10</sup> Of these groups, we considered women, respondents with no university education, and young and old voters to be members of minority, or marginalized, social groups, and men, respondents with some university education, and middle-aged voters to be members of the majority group on their respective cleavages. This not only (generally) follows precedent, but reflects the patterns of descriptive representation we see in our data: we find that men are descriptively over-represented among candidates in 96% of country-years, individuals with university education over-represented among candidates in 88% of country-years, and middle-aged individuals over-represented among candidates (relative to the young and old) in 97% of country-years.

One limitation of our analysis is our reliance on left-right self-placement as a proxy for the political opinions of voters and candidates. This may be problematic, as conceptions of left and right are known to vary across contexts and individuals (De Vries, Hakhverdian and Lancee, 2013; Rodon, 2015; Bauer et al., 2017; Steiner, 2023). Additionally, studies relying on issue-specific measures of congruence have tended to find lower overall congruence (Thomassen, 2012; Dalton, 2017), as well as variation in patterns of congruence between issues (Rosset and Stecker, 2019; Lupu and Warner, 2022). We do so nonetheless in order to construct the largest possible comparative dataset – as candidate surveys do not routinely include questions on issue-specific opinion, and issue-specific questions typically vary across time and place. Nonetheless, it is possible that our estimates of con-

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<sup>9</sup>Across surveys, the scale used to elicit respondents' left-right self-placement varies. To make these responses comparable, we rescale them to range from -1 (left) to 1 (right).

<sup>10</sup>Many of the datasets we use also contain information on the occupation of respondents – which we hope to incorporate in future versions of this paper.

gruence are biased downwards due to our reliance on this aggregated measure, and that issue-specific analyses might uncover different patterns of unequal group representation.

### 3 Results

Figure 1 plots the relative opinion presence of three different marginalized social groups, women, voters with no higher education, young and old voters, for all country-years in our sample. These quantities are plotted against the proportion of female candidates, candidates with no university education, young and old candidates, respectively. As an initial exploration of the ‘ideological congruence controversy’ (Powell, 2009; Golder and Lloyd, 2014), country-years that use a majoritarian, mixed or proportional electoral system are plotted in red, blue and green, respectively.<sup>11</sup> Recall that, if a social group has a relative opinion presence (ROP) of 1, this means that it is as well represented by candidates in that system as the typical voter – and so, not disproportionately poorly represented.

The patterns evident from these figures provide some face validity for our approach. We observe that the marginalized social group is disproportionately under-represented by candidates (i.e. with an ROP  $< 1$ ) in a majority of country years, but that this is more common for women and less educated voters than for young and old voters. Moreover, there is some evidence that less educated voters, in particular, appear to be better represented by candidates competing under PR than under majoritarian electoral rules (ref. Figure 1b). Finally, at least on gender and education, how well the opinions of a marginalized group are represented in a system is positively correlated with the proportion of in-group candidates in that system.

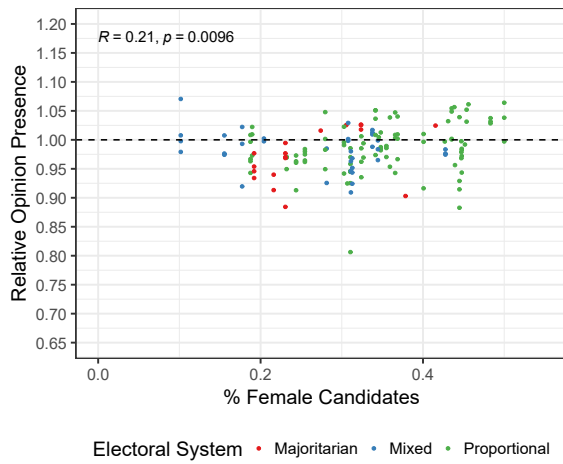
Table 1 compares the average relative opinion presence of minority and majority

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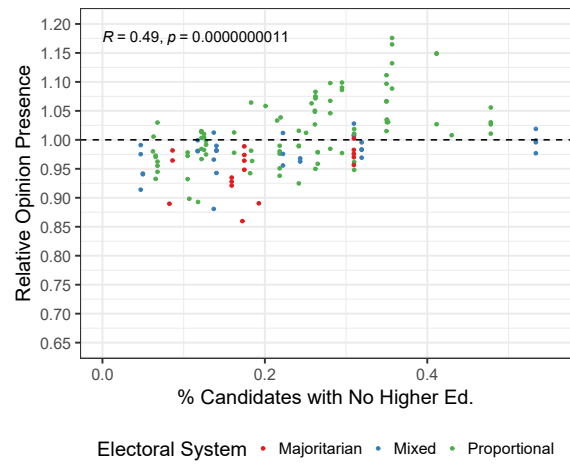
<sup>11</sup>We code the electoral system used by each country in a given year based on their classification in the dataset compiled by Bormann and Golder (2013).

Figure 1: Patterns of Minority Opinion Representation in Democracies

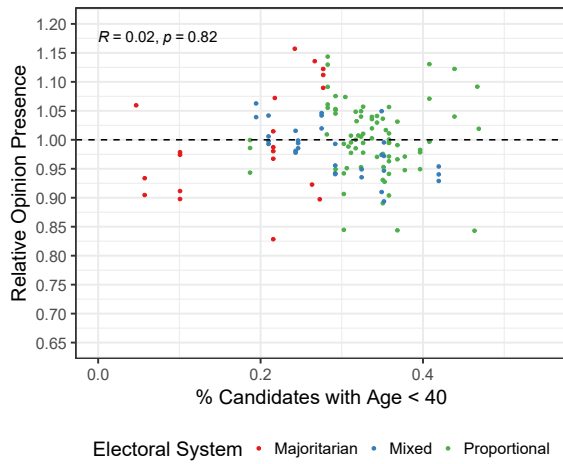
(a) Women



(b) Voters with No Higher Ed.



(c) Younger Voters



(d) Older Voters

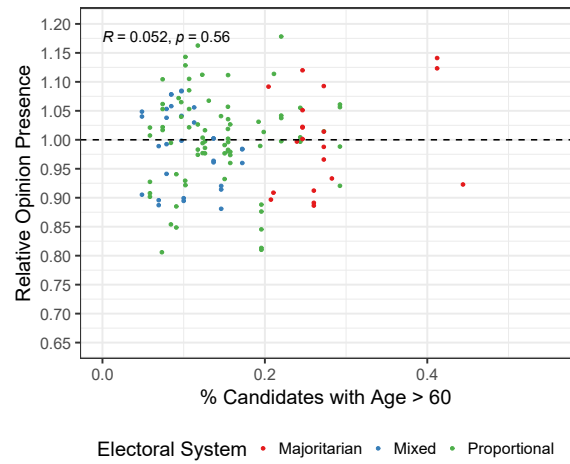


Table 1: Inequalities in Opinion Representation by Cleavage

Cleavage	ROP Minority	ROP Majority	Difference
Women / Men	0.985 (0.041)	1.018 (0.044)	-0.033** (0.011)
No Higher Ed. / Some Higher Ed.	0.994 (0.062)	1.021 (0.066)	-0.027 (0.019)
Young / Middle-Aged	0.996 (0.065)	1.006 (0.048)	-0.010 (0.011)
Old / Middle-Aged	0.999 (0.076)	1.006 (0.048)	-0.007 (0.014)

<sup>+</sup>p<0.1; \*p<0.05; \*\*p<0.01; \*\*\*p<0.001

Note: This table compares the average relative opinion presence of minority and majority social groups across three cleavages: women vs. men, voters with differing levels of education, and age. Columns (1) and (2) present the mean ROP for each social group and, in parentheses, its standard deviation. Column (3) reports the estimated coefficient from an OLS regression of the ROP of a group on its minority/majority status, with standard errors clustered by country reported in parentheses.

social groups across these three cleavages: women vs. men, voters with differing levels of education, and age. Columns (1) and (2) present the mean ROP for each social group and, in parentheses, its standard deviation. Column (3) reports the estimated coefficient from an OLS regression of the ROP of a group on its minority/majority status. In each case, the reference category is the majority group, and so the coefficient captures the estimated difference in ROP between that minority and the majority group on that cleavage.<sup>12</sup> In all cases, as well as in all subsequent regression analyses, we report standard errors clustered by country – to account for within-country correlation in the ROP of social groups (for instance, over time, as well as for groups within each cleavage in a given year).

We find that, in each case, the minority social group receives marginally worse relative opinion representation from electoral candidates than the majority social group (ref. columns (1) and (2)). However, only in the case of gender is this inequality of representation statistically significant. That said, the representational disparity we uncover is modest: we find that the opinions of women receive 1.5% less representation among candidates than the opinions of the typical voter, while those of men receive 1.8% more representation than their numbers would warrant.

Next, Table 2 reports results from a series of analyses that compare the average relative opinion presence of various minority groups by in-group and majority-group candidates. These analyses allow us to speak to the question of whether improvements in the descriptive representation of marginalized groups has implications for their substantive representation, without assuming uniform preferences or interests among members *or representatives* of these groups, as almost all other studies in this literature have done.

In particular, Columns (1) and (2) present the mean ROP for each minority among in-group and majority-group candidates, respectively, alongside the standard deviation of the mean. Column (3) reports the estimated coefficient from an OLS regression of the ROP of a minority on candidate type, again with standard errors clustered by coun-

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<sup>12</sup>The full results for these, and all following, regressions are reported in Appendix B.

Table 2: Are Minority Opinions Better Represented by In-Group Candidates?

<b>Type of Minority</b>	ROP (In-Group)	ROP (Majority-Group)	Difference
Women	0.989 (0.044)	0.981 (0.040)	0.009** (0.003)
No Higher Ed.	1.008 (0.064)	0.995 (0.055)	0.012* (0.005)
Younger Voters	1.002 (0.063)	0.998 (0.066)	0.004 (0.003)
Older Voters	1.021 (0.095)	0.994 (0.081)	0.027† (0.014)

†p<0.1; \*p<0.05; \*\*p<0.01; \*\*\*p<0.001

Note: This table compares the average relative opinion presence of minority groups among in-group candidates and majority-group candidates. Columns (1) and (2) present the mean ROP for each minority among in-group and majority-group candidates, respectively, with the standard deviation of the mean given in parentheses. Column (3) reports the estimated coefficient from an OLS regression of the ROP of a minority on candidate type, with standard errors clustered by country reported in parentheses.



try. In each case, the reference category is majority-group candidates, and so the coefficient captures the estimated difference in the ROP of the minority among in-group and majority-group candidates. We observe that the opinions of women and less educated voters are better represented by in-group candidates than they are by majority-group candidates – though, again, the gains are modest.

Table 3: Electoral Rules and Minority Opinion Representation

<b>Type of Minority</b>	ROP (Maj.)	ROP (PR)	Difference	ROP (Mixed)	Difference
All	0.976 (0.087)	1.000 (0.060)	0.025*** (0.006)	0.985 (0.044)	0.009 (0.006)
Women	0.982 (0.047)	0.987 (0.042)	0.004 (0.016)	0.982 (0.034)	0.000 (0.016)
No Higher Ed.	0.924 (0.076)	1.014 (0.054)	0.090* (0.033)	0.979 (0.029)	0.055 (0.032)
Younger Voters	0.997 (0.107)	0.999 (0.059)	0.002 (0.038)	0.986 (0.044)	-0.011 (0.037)
Older Voters	0.999 (0.089)	1.001 (0.077)	0.002 (0.030)	0.992 (0.063)	-0.007 (0.034)

<sup>+</sup>p<0.1; \*p<0.05; \*\*p<0.01; \*\*\*p<0.001

Note: This table compares the average relative opinion presence of minority social groups in countries with different electoral systems. Columns (1), (2) and (4) present the mean ROP for each minority among all candidates in majoritarian, proportional and mixed systems, respectively, with the standard deviation of the mean given in parentheses. Columns (3) and (5) report estimated coefficients from an OLS regression of the ROP of a minority on the electoral system of the country concerned, with standard errors clustered by country reported in parentheses.

Finally, Table 3 reports results from a series of analyses that speak to the ‘ideological congruence controversy’ (Blais and Bodet, 2006; Powell, 2009; Golder and Lloyd, 2014). In particular, Columns (1), (2) and (4) present the mean ROP for each minority among all candidates in majoritarian, proportional and mixed systems, respectively, with the standard deviation of the mean given in parentheses. Columns (3) and (5) report estimated coefficients from an OLS regression of the ROP of a minority on the electoral

system of the country concerned. In each case, the reference category is majoritarian electoral systems, and so the coefficient captures the estimated difference in the ROP of the minority in proportional and mixed systems, compared with the ROP of the minority in majoritarian systems.

Contrary to some of this literature, we find some representational advantage for PR over majoritarian electoral systems, with minority opinions receiving about 2.5% less representation by candidates in majoritarian systems than under PR. However, this appears to be driven by the especially poor representation of less educated voters in majoritarian systems (in this analysis, Australia, Canada and the United Kingdom) – with the opinions of less educated voters receiving almost 10% less representation than the typical voter in such systems, but about 2% *more* representation than warranted under PR. This may be linked to the particularly low number of low education candidates contesting elections in those systems, as compared to, for instance, the Nordic countries, where we find that the views of less educated citizens appear to be slightly over-represented among candidates.<sup>13</sup> However, our findings do not challenge the general conclusion in this literature that systems which are more proportional do not generally produce better ideological congruence between citizens and governments, as by focusing on the representation of citizens by electoral candidates, we are concerned with an earlier point in the ‘chain of delegation’ than studies focused on governmental congruence (Mueller, 2000).

## 4 Conclusion

In this paper, we revisit a longstanding debate on the scale and prevalence of unequal ideological representation. We do so by introducing a novel measure of ideological congruence, which we term “relative opinion presence”, which we consider to be both straightforward

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<sup>13</sup>In our data, the ROP of voters with no university education exceeds 1 frequently in Finland, Iceland, Denmark, Sweden, Norway, the Netherlands and Germany.

to calculate and easy to interpret. Our proposed measure assesses ideological congruence between candidates and voters in democratic systems by quantifying the degree to which the opinions of members of certain social groups are represented among candidates compared to the opinions of a typical voter in the electorate. We operationalize this measure using an original dataset based on responses from approximately 35,000 elite and 700,000 citizen respondents. We then apply this measure to characterise the nature and extent of ideological congruence between citizens and electoral candidates in 161 country years, spanning 25 countries and almost three decades. Our analyses reveal statistically significant inequalities in ideological congruence by gender, but not by age or education.

We are also able to use our measure to study whether candidates and citizens with similar demographic characteristics demonstrate higher levels of ideological congruence. This speaks to another long-running debate: on the implications of improved descriptive representation for substantive representation. Our study significantly improves on prior research on this topic, as researchers have rarely accounted for preference heterogeneity among the citizens or politicians belonging to the social groups concerned, which our measure and empirical approach allows. To the best of our knowledge, ours is the first study to compare the preferences of marginalized citizens with in-group candidates, rather than with candidates or legislators overall. Our results indicate that women and less educated voters are better represented by in-group candidates than by male or university-educated candidates, respectively. We do not find the same patterns by age – potentially a consequence of the lower political salience of age as a cleavage. This finding reaffirms that descriptive representation matters for the quality of substantive representation, at least on salient or ‘crystallized’ cleavages.

Finally, we employ our measure to re-assess empirical relationship between electoral systems and ideological congruence. While previous studies have disagreed on whether proportional representation is more likely to deliver ideological congruence, our results

suggest some slight advantage for PR – at least at the stage of the ‘chain of delegation’ that we consider.

The implications of our study are manifold. As well as providing further evidence for the importance of descriptive representation in contemporary democracies, our findings also have implications for the degree of political inequality and the distribution of political power in contemporary democracies. Our focus on ideological congruence is motivated by the conviction that, in democracies, the preferences and actions of political elites should not be “persistently at odds with the wishes of the represented” (Pitkin 1967, 210; see also Dahl 1971). Of course, congruence in the stated preferences of citizens and elites does not in itself guarantee that citizen interests will be actively represented by political elites – for instance, due to constraints imposed on legislators by party discipline. However, research suggests that, even subject to such constraints, elected representatives frequently act on their stated preferences – for instance, when determining which bills to sponsor (Carnes and Lupu, 2015), or choosing how to speak in parliamentary debates (O’Grady, 2019). Moreover, insofar as we value equal *voice*, the mere articulation of citizen preferences by members of the political elite, even if these preferences are not shortly enacted, has implications for the communicative power and representation of those citizens – a valuable goal in itself (Basu, 2024).

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# Appendices

## A Data Description

Table A.1: Data sources by country-year

Country	Year	Elite	Mass
Australia	2007	CCS 1	CSES 3
Australia	2010	CCS 1	CSES 4
Australia	2013	CCS 2	CSES 4
Australia	2016	CCS 2	CSES 5
Australia	2019	CCS 2	CSES 5
Austria	2008	CCS 1	CSES 3, EB 69.1, EB 69.2, EB 70.1
Austria	2009	CCS 1	EB 71.1, EB 71.2, EB 71.3, EB 71.4
Austria	2010	CCS 1	EB 73.1, EB 73.4, EB 74.1, EB 74.3, EB 75.1, EB 75.1 EP
Austria	2011	CCS 1	EB 75.2, EB 75.3, EB 76.1
Austria	2012	CCS 1	EB 77.2, EB 77.4
Austria	2013	CCS 1	CSES 4; EB 79.5
Belgium	2007	CCS 1	EB 67.1, EB 67.2, EB 67.3, EB 68.1, EB 68.2
Belgium	2008	CCS 1	EB 69.1, EB 69.2, EB 70.1
Belgium	2009	CCS 1	EB 71.1, EB 71.2, EB 71.3, EB 72.4
Belgium	2010	CCS 1	EB 73.1, EB 73.4, EB 74.1, EB 74.2, EB 74.3, EB 75.1, EB 75.1 EP
Belgium	2011	CCS 1	EB 75.2, EB 75.3, EB 76.1
Belgium	2012	CCS 1	EB 77.2, EB 77.4
Belgium	2013	CCS 1	EB 79.5
Belgium	2014	CCS 2	EB 81.2, EB 81.4, EB 82.1, EB 82.2, EB 82.3, EB 82.4
Belgium	2017	CCS 2	EB 87.1, EB 87.2, EB 87.3, EB 87.4, EB 88.1, EB 88.2, EB 88.3, EB 88.4
Belgium	2018	CCS 2	EB 89.1, EB 89.2, EB 89.3, EB 90.1, EB 90.2, EB 90.3, EB 90.4
Belgium	2019	CCS 2	CSES 5; EB 91.1, EB 91.2, EB 91.3, EB 91.4, EB 91.5, EB 92.1, EB 92.2, EB 92.3, EB 92.4
Canada	2008	CCS 1	CSES 3
Canada	2015	CCS 2	CSES 4
Chile	2017	CCS 2	CSES 5
Czech Republic	2006	CCS 1	CSES 3; EB 64.4, EB 65.1, EB 65.2, EB 65.3, EB 65.4, EB 66.1, EB 66.2, EB 66.3
Czech Republic	2007	CCS 1	EB 67.1, EB 67.2, EB 67.3, EB 68.1, EB 68.2
Czech Republic	2008	CCS 1	EB 69.1, EB 69.2, EB 70.1
Czech Republic	2009	CCS 1	EB 71.1, EB 71.2, EB 71.3, EB 72.4
Czech Republic	2010	CCS 1	CSES 3; EB 73.1, EB 73.4, EB 74.1, EB 74.2, EB 74.3, EB 75.1, EB 75.1 EP
Czech Republic	2017	CCS 2	EB 87.1, EB 87.2, EB 87.3, EB 87.4, EB 88.1, EB 88.2, EB 88.3, EB 88.4
Czech Republic	2018	CCS 2	EB 89.1, EB 89.2, EB 89.3, EB 90.1, EB 90.2, EB 90.3, EB 90.4
Czech Republic	2019	CCS 2	EB 91.1, EB 91.2, EB 91.3, EB 91.4, EB 91.5, EB 92.1, EB 92.2, EB 92.3, EB 92.4
Denmark	2011	CCS 1	EB 75.2, EB 75.3, EB 76.1
Denmark	2012	CCS 1	EB 77.2, EB 77.4
Denmark	2013	CCS 1	EB 79.5
Denmark	2014	CCS 1	EB 81.2, EB 81.4, EB 82.1, EB 82.2, EB 82.3, EB 82.4
Estonia	2011	CCS 1	CSES 3; EB 75.2, EB 75.3, EB 76.1
Estonia	2012	CCS 1	EB 77.2, EB 77.4
Estonia	2013	CCS 1	EB 79.5
Estonia	2014	CCS 1	EB 81.2, EB 81.4, EB 82.1, EB 82.2, EB 82.3, EB 82.4
Estonia	2017	CCS 2	EB 87.1, EB 87.2, EB 87.3, EB 87.4, EB 88.1, EB 88.2, EB 88.3, EB 88.4
Estonia	2018	CCS 2	EB 89.1, EB 89.2, EB 89.3, EB 90.1, EB 90.2, EB 90.3, EB 90.4
Estonia	2019	CCS 2	EB 91.1, EB 91.2, EB 91.3, EB 91.4, EB 91.5, EB 92.1, EB 92.2, EB 92.3, EB 92.4
Finland	2011	CCS 1	CSES 3; EB 75.2, EB 75.3, EB 76.1
Finland	2012	CCS 1	EB 77.2, EB 77.4
Finland	2013	CCS 1	EB 79.5
Finland	2014	CCS 1	EB 81.2, EB 81.4, EB 82.1, EB 82.2, EB 82.3, EB 82.4
Finland	2015	CCS 2	CSES 4
Finland	2017	CCS 2	EB 87.1, EB 87.2, EB 87.3, EB 87.4, EB 88.1, EB 88.2, EB 88.3, EB 88.4
Finland	2018	CCS 2	EB 89.1, EB 89.2, EB 89.3, EB 90.1, EB 90.2, EB 90.3, EB 90.4
Finland	2019	CCS 2	EB 91.1, EB 91.2, EB 91.3, EB 91.4, EB 91.5, EB 92.1, EB 92.2, EB 92.3, EB 92.4
Germany	2005	CCS 1	CSES 3; EB 63.1, EB 63.2, EB 63.4, EB 64.1, EB 64.2, EB 64.3, EB 64.4
Germany	2006	CCS 1	EB 65.1, EB 65.2, EB 65.3, EB 65.4, EB 66.1, EB 66.2, EB 66.3

Table A.1: Data sources by country-year

Country	Year	Elite	Mass
Germany	2007	CCS 1	EB 67.1, EB 67.2, EB 67.3, EB 68.1, EB 68.2
Germany	2008	CCS 1	EB 69.1, EB 69.2, EB 70.1
Germany	2009	CCS 1	CSES 3; EB 71.1, EB 71.2, EB 71.3, EB 72.4
Germany	2010	CCS 1	EB 75.1, EB 75.1 EP
Germany	2011	CCS 1	EB 75.2, EB 75.3, EB 76.1
Germany	2012	CCS 1	EB 77.2, EB 77.4
Germany	2013	CCS 2	CSES 4; EB 79.5
Germany	2014	CCS 2	EB 81.2, EB 81.4, EB 82.1, EB 82.2, EB 82.3, EB 82.4
Germany	2017	CCS 2	CSES 5; EB 87.1, EB 87.2, EB 87.3, EB 87.4, EB 88.1, EB 88.2, EB 88.3, EB 88.4
Germany	2018	CCS 2	EB 89.1, EB 89.2, EB 89.3, EB 90.1, EB 90.2, EB 90.3, EB 90.4
Germany	2019	CCS 2	EB 91.1, EB 91.2, EB 91.3, EB 91.4, EB 91.5, EB 92.1, EB 92.2, EB 92.3, EB 92.4
Greece	2007	CCS 1	EB 67.1, EB 67.2, EB 67.3, EB 68.1, EB 68.2
Greece	2008	CCS 1	EB 69.1, EB 69.2, EB 70.1
Greece	2009	CCS 1	CSES 3; EB 71.1, EB 71.2, EB 71.3, EB 72.4
Greece	2010	CCS 1	EB 73.1, EB 73.4, EB 74.1, EB 74.2, EB 74.3, EB 75.1, EB 75.1 EP
Greece	2011	CCS 1	EB 75.2, EB 75.3, EB 76.1
Greece	2012	CCS 1	CSES 4; EB 77.2, EB 77.4
Greece	2013	CCS 1	EB 79.5
Greece	2014	CCS 1	EB 81.2, EB 81.4, EB 82.1, EB 82.2, EB 82.3, EB 82.4
Greece	2015	CCS 2	CSES 4
Greece	2017	CCS 2	EB 87.1, EB 87.2, EB 87.3, EB 87.4, EB 88.1, EB 88.2, EB 88.3, EB 88.4
Greece	2018	CCS 2	EB 89.1, EB 89.2, EB 89.3, EB 90.1, EB 90.2, EB 90.3, EB 90.4
Greece	2019	CCS 2	EB 91.1, EB 91.2, EB 91.3, EB 91.4, EB 91.5, EB 92.1, EB 92.2, EB 92.3, EB 92.4
Hungary	2010	CCS 1	EB 73.1, EB 73.4, EB 74.1, EB 74.2, EB 74.3, EB 75.1, EB 75.1 EP
Hungary	2011	CCS 1	EB 75.2, EB 75.3, EB 76.1
Hungary	2012	CCS 1	EB 77.2, EB 77.4
Hungary	2013	CCS 1	EB 79.5
Hungary	2014	CCS 2	EB 81.2, EB 81.4, EB 82.1, EB 82.2, EB 82.3, EB 82.4
Hungary	2017	CCS 2	EB 87.1, EB 87.2, EB 87.3, EB 87.4, EB 88.1, EB 88.2, EB 88.3, EB 88.4
Hungary	2018	CCS 2	EB 89.1, EB 89.2, EB 89.3, EB 90.1, EB 90.2, EB 90.3, EB 90.4
Iceland	2009	CCS 1	CSES 3
Iceland	2010	CCS 1	EB 73.1, EB 73.4, EB 74.2
Iceland	2011	CCS 1	EB 75.3
Iceland	2013	CCS 2	CSES 4
Iceland	2016	CCS 2	CSES 5
Iceland	2017	CCS 2	CSES 5
Ireland	2007	CCS 1	CSES 3; EB 67.1, EB 67.2, EB 67.3, EB 68.1, EB 68.2
Ireland	2008	CCS 1	EB 69.1, EB 69.2, EB 70.1
Ireland	2009	CCS 1	EB 71.1, EB 71.2, EB 71.3, EB 72.4
Ireland	2010	CCS 1	EB 73.1, EB 73.4, EB 74.1, EB 74.2, EB 74.3, EB 75.1, EB 75.1 EP
Ireland	2011	CCS 1	CSES 4; EB 75.2, EB 75.3, EB 76.1
Ireland	2016	CCS 2	CSES 5
Ireland	2017	CCS 2	EB 87.1, EB 87.2, EB 87.3, EB 87.4, EB 88.1, EB 88.2, EB 88.3, EB 88.4
Ireland	2018	CCS 2	EB 89.1, EB 89.2, EB 89.3, EB 90.1, EB 90.2, EB 90.3, EB 90.4
Ireland	2019	CCS 2	EB 91.1, EB 91.2, EB 91.3, EB 91.4, EB 91.5, EB 92.1, EB 92.2, EB 92.3, EB 92.4
Italy	2013	CCS 1	EB 79.5
Italy	2014	CCS 1	EB 81.2, EB 81.4, EB 82.1, EB 82.2, EB 82.3, EB 82.4
Italy	2017	CCS 1	EB 87.1, EB 87.2, EB 87.3, EB 87.4, EB 88.1, EB 88.2, EB 88.3, EB 88.4
Italy	2018	CCS 1	EB 89.1, EB 89.2, EB 89.3, EB 90.1, EB 90.2, EB 90.3, EB 90.4
Malta	2013	CCS 1	EB 79.5
Malta	2014	CCS 1	EB 81.2, EB 81.4, EB 82.1, EB 82.2, EB 82.3, EB 82.4
Malta	2017	CCS 1	EB 87.1, EB 87.2, EB 87.3, EB 87.4, EB 88.1, EB 88.2, EB 88.3, EB 88.4
Montenegro	2012	CCS 2	CSES 4
Montenegro	2016	CCS 2	CSES 5
Netherlands	2006	CCS 1	CSES 3; EB 64.4, EB 65.1, EB 65.2, EB 65.3, EB 65.4, EB 66.1, EB 66.2, EB 66.3
Netherlands	2007	CCS 1	EB 67.1, EB 67.2, EB 67.3, EB 68.1, EB 68.2
Netherlands	2008	CCS 1	EB 69.1, EB 69.2, EB 70.1
Netherlands	2009	CCS 1	EB 71.1, EB 71.2, EB 71.3, EB 72.4
Netherlands	2010	CCS 1	CSES 3; EB 75.1, EB 75.1 EP
Norway	2009	CCS 1	CSES 3
Norway	2013	CCS 2	CSES 4
Norway	2017	CCS 2	CSES 5

Table A.1: Data sources by country-year

Country	Year	Elite	Mass
Portugal	2009	CCS 1	CSES 3; EB 71.1, EB 71.2, EB 71.3, EB 72.4
Portugal	2010	CCS 1	EB 73.1, EB 73.4, EB 74.1, EB 74.2, EB 74.3, EB 75.1, EB 75.1 EP
Portugal	2011	CCS 1	EB 75.2, EB 75.3, EB 76.1
Portugal	2012	CCS 1	EB 77.2, EB 77.4
Portugal	2013	CCS 1	EB 79.5
Portugal	2014	CCS 1	EB 81.2, EB 81.4, EB 82.1, EB 82.2, EB 82.3, EB 82.4
Portugal	2015	CCS 2	CSES 4
Portugal	2017	CCS 2	EB 87.1, EB 87.2, EB 87.3, EB 87.4, EB 88.1, EB 88.2, EB 88.3, EB 88.4
Portugal	2018	CCS 2	EB 89.1, EB 89.2, EB 89.3, EB 90.1, EB 90.2, EB 90.3, EB 90.4
Portugal	2019	CCS 3	CSES 5; EB 91.1, EB 91.2, EB 91.3, EB 91.4, EB 91.5, EB 92.1, EB 92.2, EB 92.3, EB 92.4
Romania	2012	CCS 1	CSES 4; EB 77.2, EB 77.4
Romania	2013	CCS 1	EB 79.5
Romania	2014	CCS 1	CSES 4; EB 81.2, EB 81.4, EB 82.1, EB 82.2, EB 82.3, EB 82.4
Romania	2017	CCS 2	EB 87.1, EB 87.2, EB 87.3, EB 87.4, EB 88.1, EB 88.2, EB 88.3, EB 88.4
Romania	2018	CCS 2	EB 89.1, EB 89.2, EB 89.3, EB 90.1, EB 90.2, EB 90.3, EB 90.4
Romania	2019	CCS 2	EB 91.1, EB 91.2, EB 91.3, EB 91.4, EB 91.5, EB 92.1, EB 92.2, EB 92.3, EB 92.4
Spain	2017	CCS 2	EB 87.1, EB 87.2, EB 87.3, EB 87.4, EB 88.1, EB 88.2, EB 88.3, EB 88.4
Spain	2018	CCS 2	EB 89.1, EB 89.2, EB 89.3, EB 90.1, EB 90.2, EB 90.3, EB 90.4
Spain	2019	CCS 2	EB 91.1, EB 91.2, EB 91.3, EB 91.4, EB 91.5, EB 92.1, EB 92.2, EB 92.3, EB 92.4
Sweden	2010	CCS 1	EB 73.1, EB 73.4, EB 74.1, EB 74.2, EB 74.3, EB 75.1, EB 75.1 EP
Sweden	2011	CCS 1	EB 75.2, EB 75.3, EB 76.1
Sweden	2012	CCS 1	EB 77.2, EB 77.4
Sweden	2013	CCS 1	EB 79.5
Sweden	2014	CCS 2	CSES 4; EB 81.2, EB 81.4, EB 82.1, EB 82.2, EB 82.3, EB 82.4
Sweden	2017	CCS 2	EB 87.1, EB 87.2, EB 87.3, EB 87.4, EB 88.1, EB 88.2, EB 88.3, EB 88.4
Sweden	2018	CCS 2	CSES 5; EB 89.1, EB 89.2, EB 89.3, EB 90.1, EB 90.2, EB 90.3, EB 90.4
Switzerland	2007	CCS 1	CSES 3
Switzerland	2010	CCS 1	EB 73.1
Switzerland	2011	CCS 1	CSES 4
Switzerland	2019	CCS 3	CSES 5
United Kingdom	1997	BRS 1997	CSES 1; EB Trend
United Kingdom	1998	BRS 1997	EB Trend
United Kingdom	1999	BRS 1997	EB Trend
United Kingdom	2000	BRS 1997	EB Trend
United Kingdom	2001	BRS 2001	EB Trend
United Kingdom	2002	BRS 2001	EB Trend
United Kingdom	2010	CCS 1	EB 73.1, EB 73.4, EB 74.1, EB 74.2, EB 74.3, EB 75.1, EB 75.1 EP
United Kingdom	2011	CCS 1	EB 75.2, EB 75.3, EB 76.1
United Kingdom	2012	CCS 1	EB 77.2, EB 77.4
United Kingdom	2013	CCS 1	EB 79.5
United Kingdom	2014	CCS 1	EB 81.2, EB 81.4, EB 82.1, EB 82.2, EB 82.3, EB 82.4
United Kingdom	2015	CCS 2	CSES 4
United Kingdom	2017	CCS 2	CSES 5; EB 87.1, EB 87.2, EB 87.3, EB 87.4, EB 88.1, EB 88.2, EB 88.3, EB 88.4
United Kingdom	2018	CCS 2	EB 89.1, EB 89.2, EB 89.3, EB 90.1, EB 90.2, EB 90.3, EB 90.4
United Kingdom	2019	CCS 2	EB 91.1, EB 91.2, EB 91.3, EB 91.4, EB 91.5, EB 92.1, EB 92.2, EB 92.3, EB 92.4

## B Regression Results

Table B.1: Inequalities in Opinion Representation by Cleavage

	DV: Relative Opinion Presence of Group			
	(1)	(2)	(3)	(4)
Women	-0.0328** (0.0108)			
No Higher Ed.		-0.0270 (0.0193)		
Younger Voters			-0.0097 (0.0106)	
Older Voters				-0.0070 (0.0144)
Constant	1.018*** (0.0056)	1.021*** (0.0100)	1.006*** (0.0057)	1.006*** (0.0057)
Observations	322	322	322	322
R <sup>2</sup>	0.129	0.043	0.007	0.003

+p<0.1; \*p<0.05; \*\*p<0.01; \*\*\*p<0.001

Note: Cell entries present coefficient estimates from OLS regressions of the relative opinion presence of a social group on its majority/minority status for three cleavages: gender, education and age. In each case, the reference category is the majority group, and so the coefficient captures the estimated difference in ROP between the minority/majority on the cleavage. Standard errors are clustered by country.

Table B.2: Are Minority Opinions Better Represented by In-Group Candidates?

	DV: Relative Opinion Presence of Minority			
	(1)	(2)	(3)	(4)
Women	0.009** (0.003)			
No Higher Ed.		0.012* (0.005)		
Younger Voters			0.004 (0.003)	
Older Voters				0.027 <sup>†</sup> (0.014)
Intercept	0.981*** (0.005)	0.995*** (0.010)	0.998*** (0.008)	0.994*** (0.013)
Observations	302	274	260	264
R <sup>2</sup>	0.011	0.011	0.001	0.024

<sup>†</sup>p<0.1; \*p<0.05; \*\*p<0.01; \*\*\*p<0.001

Note: Cell entries present coefficient estimates from OLS regressions of the relative opinion presence of a minority on candidate type for three cleavages: gender, education and age. In each case, the reference category is majority-group candidates, and so the coefficient captures the estimated difference in the ROP of the minority among in-group and majority-group candidates. Standard errors are clustered by country.



Table B.3: Electoral Rules and Minority Opinion Representation

	All	Women	No Higher Ed.	Younger Voters	Older Voters
Proportional Systems	0.025*** (0.006)	0.004 (0.016)	0.090* (0.033)	0.002 (0.037)	0.002 (0.030)
Mixed Systems	0.009 (0.006)	0.000 (0.017)	0.055 (0.032)	-0.011 (0.037)	-0.007 (0.034)
Constant	0.976*** (0.003)	0.982*** (0.014)	0.924*** (0.032)	0.997*** (0.036)	0.999*** (0.027)
Observations	644	161	161	161	161
R <sup>2</sup>	0.023	0.003	0.257	0.007	0.002

<sup>+</sup>p<0.1; \*p<0.05; \*\*p<0.01; \*\*\*p<0.001

Note: Cell entries present coefficient estimates from OLS regressions of the relative opinion presence of a minority on the electoral system in its country. In each case, the reference category is majoritarian electoral systems, and so the coefficient captures the estimated difference in the ROP of the minority in proportional/mixed systems compared to majoritarian systems. Standard errors are clustered by country.