Ideological Congruence and Citizen Satisfaction: Evidence from 25 Advanced Democracies

The Harvard community has made this article openly available. Please share how this access benefits you. Your story matters.

Citation

Citable link
http://nrs.harvard.edu/urn-3:HUL.InstRepos:25302405

Terms of Use
This article was downloaded from Harvard University’s DASH repository, and is made available under the terms and conditions applicable to Open Access Policy Articles, as set forth at http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#OAP
Ideological Congruence and Citizen Satisfaction: Evidence from 25 Advanced Democracies

Quinton Mayne & Armen Hakhverdian

Forthcoming in *Comparative Political Studies*

Abstract

Ideological congruence is an important and popular measure of the quality of political representation. The closer the match between the preferences of the public and those of elected elites, the better representative democracy is thought to function. Relatively little attention has been paid however to the effects of ideological congruence on political judgement. We address this gap by examining whether citizens use egocentric or sociotropic judgments of congruence to evaluate democratic performance. Using a variety of congruence measures, we find that citizens are unmoved by sociotropic congruence; however, our analyses provide clear evidence that egocentric congruence boosts citizen satisfaction, especially among political sophisticates. We conclude by discussing the implications of these findings for the study of ideological congruence and political representation.

1 Earlier versions of this paper were presented at annual conferences of the Midwest Political Science Association and the Dutch Political Science Association as well as a workshop at the University of Gothenburg. We thank the discussants and panel participants at these meetings for their feedback. We also thank Wouter Schakel for data assistance. We are grateful for the thoughtful comments of our reviewers as well as the editors of *Comparative Political Studies*. Finally, we would like to thank the editors of this special issue, Peter Esaiasson and Christopher Wlezien, for their support and feedback.

2 Kennedy School of Government, Harvard University, quinton_mayne@harvard.edu.

3 Department of Political Science, University of Amsterdam, a.hakhverdian@uva.nl.
Over the years ideological congruence has become an important and popular concept in the study of political representation (Huber and Powell 1994; Powell 2000, 2009; McDonald et al. 2004; Klingemann et al. 2006; Griffin and Newman 2008; Golder and Stramski 2010). Drawing on a wide range of sources, political scientists have sought to measure the degree of correspondence between the policy and programmatic positions of citizens and elite actors on broad ideological terms, most notably on a left-right dimension. Capturing longitudinal and cross-sectional variation in the quality of political representation, these measures have been used extensively to study the impact of electoral and other types of institutions on the relationship between citizens and policymakers. In this body of work, as in most existing comparative cross-national research on congruence, measures of elite-mass similarity serve as the dependent variable. The question of whether ideological congruence produces normatively desirable and substantively important outcomes, for instance in terms of citizen evaluations of the quality of representation or the functioning of democracy more generally, remains relatively understudied (notable exceptions include Brandenburg and Johns 2014; Curini et al. 2012, 2015; Dahlberg and Holmberg 2014; Ezrow and Xezonakis 2011). With this in mind, the hypothesis motivating the present study is a simple one: as a measure of the quality of democratic representation, there is good reason to believe that as congruence increases citizens are more likely to be satisfied with the functioning of democracy. In putting this expectation to the test, and building on extant scholarship in this area, we aim to further our understanding of congruence and its attitudinal effects in three ways.

4 Some have maintained that congruence is higher in proportional systems (Huber and Powell 1994; Powell 2000), while others have found no such difference between these institutional designs (Blais and Bodet 2006; Golder and Stramski 2010). More recently, Powell (2009, 2013) has argued that these inconsistent findings are a function of period and contextual effects. Golder and Lloyd (2014) have responded by showing that proportional systems hold an edge over majoritarian systems in producing better representation in legislatures, although this advantage does not extend to congruence between governments and citizens.
First, borrowing from a large and long-standing literature on economic voting, we draw a
distinction between egocentric and sociotropic congruence. We define egocentric
congruence as the ideological match between one or more elected representatives and an
individual citizen; sociotropic congruence on the other hand describes the ideological match
between one or more elected elites and the citizenry as a whole. This conceptual distinction
allows us to test what matters most to citizens when judging the functioning of democracy;
that they themselves form an ideological match with representative institutions, such as the
government or legislature, or that this match extends to the whole of the electorate.

Second, building on the data collected by Golder and Stramski (2010), we aim to present
a comprehensive test of the relationship between ideological congruence and citizen
satisfaction by including a wide range of congruence measures. We first distinguish between
measures that capture the distance in ideological point estimates between elite actors and
the public and measures that compare ideological distributions. Moreover, we calculate
these congruence measures separately for both the government of the day and the
legislature as a whole.

Third, in addition to testing for the direct effects of various measures of ideological
congruence on citizen satisfaction we investigate whether the effects of congruence are
contingent upon a person’s political sophistication. While a positive relationship between
representative congruence and citizen satisfaction seems plausible in the abstract, it is also
possible that, given its potential complexity and concomitant inscrutability as a feature of
the political environment, congruence – whether egocentric or sociotropic – may in reality
only affect those capable of ascertaining its presence and degree.

In the end our analyses provide no evidence that variations in sociotropic congruence are
related to how citizens think about the general working of their political system. None of the
sociotropic measures is found to impact citizen satisfaction, even among political sophisticates. In contrast, we find clear evidence that egocentric congruence matters for citizen satisfaction. In addition, political sophistication moderates the relationship between egocentric congruence and citizen satisfaction. Specifically, egocentric congruence boosts the chances of satisfaction more among citizens with the highest levels of political sophistication.

In the next section we elaborate on the concept of ideological congruence as one aspect of political representation that citizens might take into account when evaluating democratic performance. We then introduce the distinction between egocentric and sociotropic congruence, the rationale for thinking that they might affect citizen satisfaction, and the proposition that we should allow for citizen heterogeneity based on political sophistication. After outlining various measures of executive and legislative congruence, we describe the data and methods that we employ and present the results of a series of multilevel models estimated using data for 25 democracies drawn from modules 1, 2, and 3 of the Comparative Study of Electoral Systems (CSES). The final section discusses the implications of our findings for the study of political representation.

**Does congruence matter?**

The dependent variable of our analysis is citizen satisfaction. This term refers to the attitudinal orientation of a citizen toward the overall performance of democracy in his or her respective country. In consonance with the bulk of existing research in this area (Anderson and Guillery 1997; Anderson et al. 2005; Kornberg and Clarke 1992), we view citizen satisfaction as neither a purely affective nor exclusively cognitive attitude. Rather it combines both affect and cognition to form what Manfred Kuechler (1991: 280) calls “a sort
of emotionally-biased running tally,” where performance is judged, among other things, according to how well the actual functioning of a political system meets normative expectations about democracy.

Foundational to the idea of representative democracy as a way of producing government by and for the people is the expectation that the preferences of voters and those of elected officials will match, leading to the formulation and implementation of policies and programs that are responsive to the needs and demands of citizens. Leaving aside for the moment the fact that there are multiple ways of understanding this notion of matching, the idea that government is supposed to be for the people suggests that the closer the alignment between popular and elite preferences the “better” democracy becomes. Beyond this abstract idea, however, congruence could form an important part of how ordinary citizens in practice commonly understand and evaluate democracy. Across the democratic world elections are fought with explicit reference to their importance as mechanisms for ensuring that those in office hold values and ideals supported by voters. When ideological congruence is high, citizens might therefore be more inclined to look favorably upon their particular country’s democratic performance, not just because of the realization of an abstract democratic principle valued in and of itself but also and probably more importantly because of a belief that elites who are ideologically proximate to citizens are more likely to produce policies that are responsive to popular preferences. In sum, if citizens care about elite-mass matching and use it to evaluate the quality of representation in their particular country (see Aarts and Thomassen 2008), congruence should increase the likelihood of a citizen expressing satisfaction with the functioning of democracy.

See Sabl 2015 for a discussion of the place of such a principle of responsiveness in democratic political theory.
The question of what the appropriate objects of evaluation should be when thinking about the issue of ideological congruence is an important one. A long-standing literature on economic voting argues that individual-level electoral behavior can be influenced by a person’s assessment of his or her personal economic circumstances as well as by their country’s overall economic performance (e.g., Kinder and Kiewiet 1981; Gomez and Wilson 2001). Scholars working in this area commonly refer to the former as egocentric or pocketbook voting and the latter as sociotropic voting. Borrowing directly from this literature we believe it is analytically useful to draw a distinction between egocentric and sociotropic variants of congruence when testing for the effects of congruence, be they attitudinal or behavioral. Egocentric congruence therefore refers to the ideological proximity between a given individual and one or more elected representatives; sociotropic congruence describes the distance between one or more elected elites and the citizenry as a whole.

In what is arguably the most important attempt to date to conceptualize congruence, Matt Golder and Jacek Stramski (2010) recognize egocentric congruence (or what they call “one-to-one” congruence) as conceptually distinct from other types of sociotropic congruence. Given their ultimate interest in testing for the effects of electoral design on substantive representation, Golder and Stramski focus on conceptually refining and developing measures for variants of sociotropic congruence. As the aim of the current study is to provide a comprehensive account of the possible effects of congruence on citizen satisfaction, we pay attention to both egocentric and sociotropic types of congruence.

When evaluating the quality of representation and the overall functioning of democracy, citizens are likely to use information that is immediate and personal. In the case of egocentric congruence, the primary point of reference is the citizen qua individual. Here,
the focus is on ideological consonance between one or more elected representatives on the
one hand and the individual citizen on the other; the same individual whose political
judgment we are also interested in capturing. As an individual-focused measure, egocentric
congruence might therefore be thought to pass a test of immediacy and personal relevance.
As such, the higher egocentric congruence is for a given individual, the more likely she is to
feel her interests and needs are being served by elected representatives and, in turn, the
more likely she is to look favorably upon the overall performance of democracy. This idea
that egocentric congruence might be positively related to citizen satisfaction has already
found some empirical support (Brandenburg and Johns 2014; Kim 2009; Dahlberg and
Holmberg 2014; Curini et al. 2012; though for a contrary view see Singh et al. 2011).

There are also compelling reasons to believe that attitudes toward democratic
performance are shaped by how well elected officials are representing society as a whole,
and not just the individual citizen. Drawing on the theoretical apparatus and empirical
findings of existing scholarship on economic voting (e.g., Kramer 1983), sociotropic
congruence may affect citizen satisfaction via at least two different individual-level
mechanisms. First, a citizen may consider lower levels of sociotropic congruence as
indicative of the inability or unwillingness of elected representatives to enact and
implement policies in line with her own interests, and not necessarily those of the
electorate at large. Second, higher levels of society-wide congruence may cause a person to
view the overall functioning of democracy more favorably due to a public-spirited concern
for the political well-being of fellow citizens.

While citizens likely care about ideological congruence in the abstract, be it egocentric or
sociotropic, we recognize that from the perspective of the individual citizen congruence is
far from an easily observable feature of a given political system. Unlike rates of economic
growth or unemployment (measures of performance that lie at the heart of the economic voting literature), neither the media nor political elites produce or report on measures of ideological congruence. When the issue of representative quality is debated publicly it is almost exclusively in terms of substantive representation and responsiveness—that is, whether elites are enacting laws and producing policies in line with the public mood. And even then, citizens would need to evaluate whether or not politicians are acting in a manner that is responsive to their wishes. Practically speaking, we might therefore expect only the most cognitively sophisticated citizens to be capable of gathering and making sense of the information necessary to arrive at an accurate understanding of the ideological match between elected officials and themselves. That said, even in the absence of this information citizens may be able to decode some but not other types of ideological congruence. In order to assess egocentric congruence, citizens must be able to make a judgment regarding the ideological position of the government of the day and gauge how close this is to their own ideological leaning. Given the widespread role played by parties and partisan cues, making an assessment of egocentric congruence should not be particularly demanding for the average citizen, though it may be easier for those with higher levels of political sophistication. In contrast, decoding levels of sociotropic congruence is likely much more cognitively taxing. Gauging levels of sociotropic congruence requires individuals to identify the ideological inclinations of all or most of their fellow citizens, be this in terms of the median voter or even the spread of ideological preferences across society as a whole. If this is indeed true, only the most cognitively sophisticated citizens might be capable of gathering and making sense of the information necessary to arrive at an accurate assessment of sociotropic congruence.
In view of the potential complexity and concomitant intelligibility of egocentric and sociotropic congruence, it is important to go beyond an undifferentiated view of citizens and incorporate population heterogeneity into our models of citizen satisfaction. In addition therefore to testing for the direct effects of egocentric and sociotropic congruence on citizen satisfaction, we examine whether the effects of variants of these two types of congruence are conditional on a person’s level of political sophistication.

**Measuring ideological congruence**

Ideological congruence captures the correspondence between the preferences of the electorate and those of elected officials on a certain issue dimension. Some scholars analyze congruence for specific policy issues, such as European integration (Rohrschneider and Whitefield 2007; De Vries and Arnold 2011), but data availability limits most comparative studies to an overarching left-right axis (Golder and Stramski 2010; Huber and Powell 1994; Lijphart 1999; McDonald and Budge 2005; Powell 2000, 2009). In the following section we conceptualize and operationalize a variety of congruence measures, which will form the primary explanatory variables of interest in our empirical analyses.

Estimates of the ideological position of political parties and citizens form the backbone of most existing congruence measures. Powell (2009) reviews three common approaches, each with its own strengths and weaknesses. The first uses expert survey data on party positions to locate governments and mass survey data to capture the preferences of the median voter (e.g., Huber and Powell 1994; Powell 2000). The second approach codes election manifestos to calculate the ideological positions of both governments and voters (e.g., McDonald and
Budge 2005; Klingemann et al. 2006). The third approach relies solely on mass survey data to locate governments and citizens (e.g., Blais and Bodet 2006; Golder and Stramski 2010). Given the importance of capturing citizens and elected officials on the same metric at the same point in time, Golder and Stramski (2010) calculate party positions using responses from the 40% highest educated respondents who have been asked to place political parties on a left-right scale running from 0 (left) to 10 (right) (see also Curini et al. 2012). In addition, respondents’ ideological self-placements are used to capture mass preferences on the same scale. Unlike the first approach, which has to rescale either expert-level and/or mass-level variables to fit the same metric, this third approach enables a cleaner comparison of elite and mass preferences.

The congruence measures that we use in the current study vary along three dimensions. First, we distinguish between individual-level and macro-level measures in order to test for the existence of egocentric and sociotropic evaluations. Second, we construct congruence measures in terms of distance from both the government and the legislature. Third, for our sociotropic measures we calculate congruence as the distance between the ideological point estimates of elites and masses and the overlap in their preference distributions.

*Egocentric measures of congruence*

Capturing congruence at the individual-level is straightforward. We simply calculate the absolute distance between an individual citizen and the ideological position of the government or legislature. We arrive at point estimates for the position of the government and the legislature by calculating the average position of the constituent parties, weighted

---

6 The position of the median voter is derived from the left-right manifesto scores of parties and the respective vote shares of these parties (Kim and Fording 1998; see Warwick and Zakharova 2013 for a critique of this method).
by their respective seat shares.\textsuperscript{7} Using the position of the party of the Prime Minister (instead of the position of the government) and the position of the median legislative party (rather than the weighted average of all legislative parties), yields substantively identical results.\textsuperscript{8} These measures have a theoretical range of 0 (where government or legislature and the individual citizen occupy the exact same location on the left-right spectrum) to 10 (where government or legislature and citizen occupy opposing ends of the left-right spectrum).

\textit{Sociotropic measures of congruence}

The most common way of capturing ideological congruence at the macro-level is to calculate the absolute left-right distance between an elite actor and the median citizen. For this form of congruence we summarize the distribution of citizen preferences by its median value and calculate its absolute distance from the ideological position of the government or legislature. The larger the distance, the worse representative democracy is said to function. It is also important to note in passing that this measure of absolute median citizen congruence has formed the backbone of the influential literature on the institutional determinants of congruence (Huber and Powell 1994; Lijphart 1999; McDonald and Budge 2005; Powell 2000, 2009).\textsuperscript{9}

\textsuperscript{7} Seat share information was taken from Döring and Manow 2015.

\textsuperscript{8} The correlation between the congruence measures capturing individual-level ideological distance from the party of the prime minister and governing party/parties is unsurprisingly extremely high (on the order of $r=0.93$, $p<.000$). The same is true for the measures capturing distance from the median legislative party and the legislature as a whole (on the order of $r=0.81$, $p<.000$). Results from these additional analyses can be obtained from the authors.

\textsuperscript{9} Golder and Stramski also define what they call \textit{absolute citizen congruence}, which refers to the average absolute distance between the government and all of its citizens (see Achen 1978). In addition, they propose a measure of \textit{relative citizen congruence}, which assesses how ideologically congruent a government is relative to what is realistically feasible. This avoids the situation in which, for instance, a British government that is sub-optimally located compared to its citizens is considered more congruent than a Dutch government that is optimally placed, simply because the Dutch population is more dispersed. Still, these two measures correlate
Arguably Golder and Stramski’s most notable innovation concerns their measurement of *many-to-many congruence*, but whether or not this type of congruence actually matters to citizens is less clear. While most measures of congruence take the government or a group of representatives as a unitary actor, many-to-many congruence captures the correspondence between the ideological distributions of both citizens and representatives. Complete overlap between the left-right distributions of the electorate and elected officials would indicate perfect congruence. While Golder and Stramski acknowledge that this form of congruence has a long pedigree, going back to the work of John Stuart Mill, Edmund Burke, and Mirabeau, they rightly note that it has been conspicuously absent from empirical work on representation. Exceptions however exist: Robert Weissberg (1978) argued for the study of representation of the American people by linking citizen opinions to Congress as a whole rather than focusing on citizen-representative dyads; more recently, Rudy Andeweg (2011) empirically examines many-to-many congruence in the Netherlands over time and shows that the overlap in the distributions of left-right preferences of MPs and voters has increased substantially over the past thirty years to the point where policy congruence is ‘almost perfect’ (Andeweg 2011: 47).

The calculation of *many-to-many congruence* is empirically challenging. Ideally, one would compare the distribution of citizens’ preferences to the distribution of representatives’ preferences. The former is easily obtained from surveys, but the latter is difficult to measure due to the rarity of comparative cross-national surveys of elite actors. Golder and Stramski resort to a different strategy to calculate the left-right distribution of elected officials. For a particular party with a left-right score of 3.5, they place half of that party’s legislators in category 3 and half in category 4. A position of 3.6 would indicate that

---

very highly with their sociotropic measure of government congruence which we employ (0.86 and 0.82 respectively for their 40 country-years), so we restrict our analyses to this better known measure.
40% of that party’s representatives are located in category 3, while 60% would be located in category 4. Once all legislative parties have been parsed in this manner, a frequency distribution of legislators on the left-right scale can be obtained.

Measures of many-to-many congruence then capture the overlap in the frequency distributions of citizens and representatives. The left-hand graph of Figure 1 illustrates many-to-many congruence following the 2009 Portuguese general election. A score of 0 indicates no overlap whatsoever between elites and citizens; a score of 100 indicates a perfect overlap between elites and citizens. One potential drawback of comparing frequency distributions is that the resulting measure is not sensitive to the shape and location of the distributions. This means that in the case of our Portuguese example the reported congruence score would remain the same even if the center-right peak among representatives were to move to the right; a change that would actually result in the ideological match between citizens and representatives becoming significantly worse. For this reason, rather than comparing probability density functions of elite and mass preferences, Golder and Stramski propose that cumulative density functions be used instead (Figure 1, right-hand graph).

**FIGURE 1**

It is important to note that countries can score high on one measure of sociotropic congruence but low on others. The three sociotropic measures of congruence are only weakly related for the 59 country-years in our analyses (see appendix Table A3). When citizens and elected elites are linked as unitary actors we appear to be capturing a different aspect of representation than when they are linked using their respective left-right
distributions. Existing research has shown that this difference has implications for the institutional determinants of congruence. That is to say, the proportionality of the electoral system matters for legislative congruence, but not for government congruence (Golder and Stramski 2010; Golder and Lloyd 2014). Whether these various measures also produce different results in terms of citizen satisfaction remains to be seen.

**Data and method**

As just noted, Golder and Stramski create their measures of ideological congruence based on mass survey data; specifically, they use data from a subset of countries involved in the first two modules of the Comparative Study of Electoral Systems (CSES). We extend the work of Golder and Stramski here by calculating congruence measures for CSES module 3.\(^{10}\) We also add measures for legislative congruence at the individual and country level. The CSES also contains a standard question asking respondents how satisfied they are with the functioning of democracy in their country. For ease of interpretation, the congruence measures have been transformed so that an increase in value denotes ideological proximity (not distance).

Given that the measures we wish to include in our analysis vary across individuals and countries as well as over time within countries, and in view of the dichotomous coding of our dependent variable (where 1 indicates satisfaction with democratic performance), we estimate a series of hierarchical logistic models.\(^{11}\) Aggregate levels of citizen satisfaction vary considerably across the sample of countries included in our models from 20% in post-

---

\(^{10}\) See appendix, Table A1, for further information on the countries and country-years included in our analyses.

\(^{11}\) As the econometric literature on hierarchical modeling demonstrates (Snijders and Bosker, 1999; Steenbergen and Jones, 2002), failing to model the multilevel structure of data can severely bias estimation by creating a range of statistical problems, such as clustering, non-constant variance, and the underestimation of standard errors for contextual variables. Models were estimated using MLwiN from within Stata, see Leckie and Charlton 2013.
communist democracies such as Romania and Bulgaria to more than 90% in Scandinavian countries such as Denmark and Norway.

In addition to testing for the direct effects of ideological congruence, our analyses aim to shed light on whether the effects of congruence depend on citizens’ capacity to ascertain overall levels of congruence in their respective countries at a given point in time. To test for this conditional effect, we include a dummy variable for political sophistication captured using data on education (where respondents are coded 1 if they have received a college degree or are currently attending university).

Drawing on the findings of existing research on citizen satisfaction, we control for the potential confounding effects of a number of variables operating at both the individual and country level. At the individual level we include demographic and socioeconomic controls for age, gender, income, and employment status. Time and again, research in political behavior has shown that respondents who report having voted for a party that goes on to form the government of the day are more likely to be satisfied with the functioning of democracy than national electoral losers.\(^\text{12}\) In light of the explanatory power of this national electoral winner variable, we include it as a control in our models. At the country level we include two measures of macro-economic performance—namely, annual growth in real GDP and the unemployment rate, as well as a dummy for post-communist democracies.\(^\text{13}\)

**Results**

Before delving into the results of the multilevel models, we first present straightforward macro-level evidence on the general relationship between sociotropic congruence and

\(^{12}\) Anderson et al., 2005; Anderson and Guillory, 1997; Anderson and Tverdova, 2001; Anderson and LoTempio, 2002; Anderson and Mendes, 2006; Banducci and Karp, 2003; Blais and Gélineau, 2007; Curini et al. 2012; Moehler, 2009; Singh 2013; Singh et al. 2012.

\(^{13}\) Descriptive statistics for the variables included in our analyses can be found in the appendix, Table A2.
citizen satisfaction (see Figure 2). In these scatterplots aggregate levels of citizen satisfaction for the 59 country-years in our sample are plotted against three different measures of sociotropic congruence. The left-hand and middle graphs show that the absolute median citizen distance from the government and legislature is uncorrelated with levels of citizen satisfaction. The signs of the coefficients are negative, indicating lower levels of aggregate satisfaction in country-years with lower levels of sociotropic congruence (that is, greater ideological distance). The association between the two variables is far from reaching conventional levels of statistical significance. Our measure of many-to-many congruence appears to fare somewhat better. As the right-hand plot indicates, the expected negative relationship between ideological distance and aggregate satisfaction is stronger for many-to-many congruence than was the case for the two measures of absolute median citizen distance. Moreover, the relationship plotted in the right-hand graph comes close to achieving a conventional level of statistical significance. Taken together, however, these bivariate analyses suggest that greater ideological correspondence between citizens and elected officials, both measured in sociotropic terms, does not appear to induce higher levels of satisfaction with the functioning of democracy.\textsuperscript{14} Of course it remains to be seen whether these findings will be reproduced when appropriate controls at the macro and micro levels are introduced. It is to these multilevel models of sociotropic congruence as well as models testing for the effects of egocentric congruence that we now turn.

\textbf{FIGURE 2}

\textsuperscript{14} This finding adds to a set of mixed results from extant research. Ezrow and Xezonakis 2011 find evidence of a positive relationship between sociotropic congruence and citizen satisfaction using aggregate-level data. Dahlberg and Holmberg 2014 also find support for a relationship between sociotropic congruence and citizen satisfaction at the aggregate-level, though this effect loses statistical significance once a measure of government effectiveness is controlled for.
Table 1 displays the results of six models that test for the effects on citizen satisfaction of our two measures of egocentric congruence—first, the absolute ideological distance between individual survey respondents and the government of the day; and second, the absolute ideological distance between individual respondents and the legislature as a whole. Given a very high individual-level correlation between these two measures of egocentric congruence (on the order of $r=0.67$, $p<.000$), we estimate the same models for each measure of egocentric congruence separately. Models 1 and 2 test for the direct effects of egocentric congruence on citizen satisfaction, excluding a control for being a national electoral winner, which is subsequently included in models 3 and 4. Finally, models 5 and 6 test for the potential conditioning effects of political sophistication.

Before elaborating on our main variables of interest, we note that men are more likely to be satisfied than women, and that at the individual level citizen satisfaction is positively related to rising income and negatively related to age and being unemployed.\textsuperscript{15} We furthermore observe that macro-level economic conditions influence citizen satisfaction as suggested by previous research. People are more likely to be satisfied with the functioning of democracy in the face of an expanding economy (captured by growth in real GDP) and less likely to be satisfied with their country's democratic performance when the level of unemployment rises. Citizens in post-communist societies are also significantly less politically satisfied, above and beyond the economic conditions present in those countries.

TABLE 1

\textsuperscript{15} The full results from these and the other models included in our analyses can be found in Tables A4 and A5 of the online appendix accompanying this paper.
The positive and highly significant coefficients for the congruence variables included in models 1 through 4, presented in Table 1, clearly suggest that egocentric forms of congruence are related to citizen satisfaction. As the left-right distance between individual citizens and elected officials grows, citizens become less likely to express satisfaction with their country’s democratic performance. This finding holds whether ideological congruence is measured as distance from members of parties who sit in government or from parliamentarians taken as whole. Moreover and importantly, as models 3 and 4 indicate, the coefficients for our two measures of egocentric congruence remain statistically significant (though reduced in size) even after controlling for the powerful effects of being a national electoral winner.

In their current form, the coefficients in Table 1 are difficult to interpret. In order therefore to get a clearer sense of the real-world import of egocentric congruence for citizen satisfaction, we estimate changes in the predicted probability of being satisfied that result from varying levels of ideological distance from the government and legislature. Holding control variables at their mean or mode, the results of models 3 and 4 indicate that variation in egocentric congruence is associated with substantively meaningful change in the predicted probability of democratic satisfaction. A shift from one standard deviation below the mean to one standard deviation above the mean in the ideological distance of a survey respondent from his or her government (amounting to a change of roughly 3 points in our measure of distance, which runs from almost -9 to zero) is tied to approximately a 4.5-point increase in the expected probability of the same individual being satisfied with the functioning of democracy. The effect of ideological distance from the legislature as a whole is more modest in real terms. A change from one standard deviation below the mean to one standard deviation above the mean in the ideological distance of the average citizen from
his or her national parliament (equivalent to 3.5 points on a scale running from -6.3 to zero) results in roughly a 3-point boost in democratic satisfaction. These marginal effects may seem modest, but to put them into perspective, a shift in income from the lowest to the third (and modal) quintile is predicted to boost the chances of satisfaction by approximately 5 percent.

These findings echo the results of other recent studies (Curini et al., 2012), including a number of pieces that use different measures of egocentric congruence. Kim (2009), for example, finds that citizen satisfaction rises, the closer an individual is ideologically to the median party in parliament. Dahlberg and Holmberg (2014) observe a similar result when egocentric congruence is measured as the distance between a citizen’s left-right self-placement and their placement on the same ideological scale of the party they voted for in the last general election. Likewise, Brandenburg and Johns (2014) find that respondents who perceive themselves as further away from one of their country’s major parties tend to be less satisfied with the functioning of democracy.

Still, gauging the actual extent of left-right overlap between oneself and the government of the day, not to mention the legislature as a whole with its multiple parties of varying sizes, places particular demands on the cognitive abilities of citizens. We therefore hypothesized that the higher educated would be better able to ascertain the nature of ideological congruence and, as a result, more sensitive to its effects compared to those with a lower level of education. The final two models included in Table 1 put this line of reasoning to the test. Both models include a cross-level interaction term to test for the conditioning effect of education: in model 5 a university-education dummy is interacted with our measure of egocentric congruence captured in terms of individual respondents’ ideological distance from the government; in model 6 the same education dummy is
interacted with our second measure of egocentric congruence, measured as distance from the legislature.

Controlling for the effects of being a national electoral winner and several other important individual- and macro-level variables, the coefficients for both measures of egocentric congruence are positive and statistically significant. This indicates that among respondents without a higher level of education (that is, those who receive a score of zero on the education dummy), ideological congruence boosts citizen satisfaction. Importantly, the interaction terms in models 5 and 6 are positive and statistically significant. This provides clear evidence that ideological congruence has a larger effect on the higher educated than on the less educated. In other words, when it comes to evaluating their country’s democratic performance, political sophisticates do indeed appear to be more responsive to egocentric forms of congruence than those with lower levels of political sophistication.

In substantive terms, a shift from one standard deviation below the mean to one standard deviation above the mean in the ideological distance of political sophisticates to their respective governments boosts their chances of political satisfaction by 7 points. The equivalent predicted boost for the remaining survey respondents is 4 points. To give a sense of the magnitude of this effect, the increased likelihood of satisfaction that comes from the same change in congruence for political sophisticates is roughly equivalent to the estimated 7-point difference in predicted satisfaction between the employed and unemployed. Political sophistication also moderates the effect of distance from the legislature, and to a larger degree in both absolute and relative terms. Citizens with high levels of political sophistication are roughly 6 percent more likely to be satisfied with the functioning of democracy when their ideological proximity to the legislature narrows from one standard
deviation below to one standard deviation above the mean. The same change in ideological congruence among low political sophisticates boosts their probability of satisfaction by close to 2.5 points.

To further explore the potential conditioning effects of political sophistication, we ran an additional set of analyses on a smaller sample of countries for which a measure of political knowledge was available. Interestingly, while the results in Table 1 demonstrate the moderating effect of education, we find no such effect for political knowledge. When hypothesizing about the potential conditioning effect of political sophistication, we argued that having the cognitive capacities to identify levels of congruence were key. That education but not political knowledge should moderate the effects of congruence might suggest, however, that perhaps what matters more than being able to ascertain with accuracy the realities of ideological congruence is caring normatively about congruence. As previous studies have shown, higher levels of education are positively related to support for a range of democratic principles and liberal values (Dalton 1994; Hibbing and Theiss-Morse 2002; McClosky and Zaller 1984; Bobo and Licari 1989; Hyman and Wright 1979; Nie et al. 1996; Vogt 1997). If the measure of political knowledge available in the CSES modules does a good job of capturing cognitive capacity, then the moderating effect that we find for education (and that remains even after controlling for political knowledge) may actually be driven by individual-level variation in the normative importance that citizens attach to ideological matching with elites. At the same time, the lack of any observed moderating effect of political knowledge might also suggest that the available measure is ineffective at

---

16 Across the three modules of the CSES, surveys included three items on political information. Respondents who answered all three questions correctly (on average approximately a fifth of the entire sample) were coded 1. The full results of these analyses are reported in an accompanying appendix, Table A6.
17 The conditioning effects of education were also robust to the inclusion of political knowledge as a control variable.
capturing variation in cognitive abilities across countries.\textsuperscript{18} Given the variables collected by the CSES (like many cross-national survey programs), there are currently limited means available to put these speculations to the test.

We now turn to the models focused on the effects of sociotropic congruence on citizen satisfaction. In line with the bivariate findings described earlier and plotted in Figure 2, the results of the multilevel models contained in Table 2 suggest that sociotropic congruence is unrelated to citizen satisfaction. None of the coefficients for sociotropic congruence that result from fitting models 1 and 2 achieve statistical significance at conventional levels. When evaluating the functioning of democracy, individual respondents do not therefore seem to judge their political system’s performance based on the absolute median citizen distance from the government or legislature or on the overlap in left-right distributions of citizens and representatives.

TABLE 2

For sociotropic congruence to exert an effect on citizen satisfaction, individual respondents must be able to ascertain the left-right positions of both elected officials and their fellow citizens taken a whole. Given the heavy cognitive demands of doing both simultaneously, model 3 tests for the potential conditioning effects of education. In light of our hypotheses, it comes as no surprise that sociotropic congruence is unrelated to citizen satisfaction among low political sophisticates (indicated by the statistical insignificance of the congruence coefficients). However, contrary to our expectations, none of the

\textsuperscript{18} Political knowledge is measured in different ways in the different countries taking part in the CSES program. In some countries respondents are posed a set of questions related to historical events and constitutional arrangements. In other countries, respondents are asked to identify politicians by name based on a set of photographs.
interaction terms between education and our measures of sociotropic congruence reaches conventional levels of statistical significance.\textsuperscript{19} Put simply, citizen satisfaction among respondents with the highest levels of education appears to be as unaffected by change in sociotropic congruence as it is among those with lower levels of education.

\textbf{Discussion and Conclusion}

The study of representation lies at the very heart of political science. There are various ways of understanding what it means for a citizen to be represented in the political arena. Many scholars focus on the extent to which elected representatives produce policies and programs that accord with the interests and preferences of citizens (Stimson et al. 1995; Soroka and Wlezien 2010). In this paper we add to a well-established body of research that examines representation from a different perspective, namely in terms of the correspondence between the ideological positions of elites and those of the general public. Though much has been written on the institutional determinants of ideological congruence (Blais and Bodet 2006; Golder and Lloyd 2014; Golder and Stramski 2010; Powell 2000, 2009), less work exists on its attitudinal and behavioral effects. In this paper we addressed this gap in the literature by examining whether citizens are more likely to be satisfied with the functioning of democracy as ideological congruence increases.

The primary goals of our paper were threefold: conceptual, empirical, and theoretical. First, we hope that the distinction we introduce here between egocentric and sociotropic congruence will prove analytically useful to the growing body of work on ideological congruence. Borrowing from the economic voting literature, we suggested that when evaluating the quality of political representation citizens might incorporate information

\textsuperscript{19} The same is true for a separate set of models (the results of which are contained in the accompanying) where our three measures of sociotropic congruence are interacted with political knowledge.
related to their personal situation as well as society as a whole. Regarding the former, an egocentric judgment of congruence would require citizens to determine whether their own personal ideological position matches that of elected elites. In terms of the latter, a sociotropic judgment would require citizens to assess the extent to which elected elites match the views of the electorate as a whole.

Second, in testing for the attitudinal effects of ideological congruence we have sought to push forward research in this area by incorporating a comprehensive set of empirical indicators. Drawing on the work of Golder and Stramski (2010), we examined the effects of three variants of sociotropic congruence alongside two measures of egocentric congruence. The first two sociotropic variables (related to absolute median citizen congruence) were measured as the distance between the median citizen and the government of the day on the one hand and the legislature as a whole on the other. The third measure (many-to-many congruence) matched the left-right distribution of the public with that of the legislature. In addition, we measured egocentric congruence as the absolute distance on the left-right scale between each individual respondent and his or her government as well as the legislature.

Third, in theorizing about the effects of ideological congruence on citizen satisfaction we aim to add to existing work that, by giving serious consideration to citizen heterogeneity, eschews the idea that citizens are all cut from the same cloth (De Vries and Giger 2014; Gomez and Wilson 2006; Hakhverdian and Mayne 2012). In addition to examining the direct relationship between our five measures of congruence and citizen satisfaction, using a set of cross-level interactions we tested for their conditional effects. Given the heavy burden that ascertaining the true nature of congruence might place on an individual’s cognitive abilities,
we examined whether citizens with higher levels of political sophistication might be more sensitive and responsive to congruence.

In the end our analyses provide no evidence that variations in sociotropic congruence affect how citizens evaluate the general working of their political system. Neither absolute median citizen congruence nor many-to-many congruence appears to affect citizen satisfaction, even among political sophisticates. In contrast, we found clear evidence that both measures of egocentric congruence are related to citizen satisfaction; and these effects remain even after controlling for the powerful positive impact of having voted for a governing party. In addition, we found that political sophistication moderated the relationship between both forms of egocentric congruence and citizen satisfaction. Specifically, egocentric congruence boosted the chances of satisfaction more among citizens with the highest levels of political sophistication.

These findings have a number of implications for the study of ideological congruence and political representation more generally. Reflecting on both the egocentric and sociotropic results of our analyses it is important to recognize that they cannot be viewed as clear evidence in support of a self-interested citizenry. As research on economic voting has long argued (see, e.g., Kramer 1983; Gomez and Wilson 2001), evidence of an egocentric effect does not necessarily mean that citizens are viewing performance (in this case representative performance) through the lens of self-interest. An assessment of egocentric performance may well function as an immediate and relevant cue used to arrive at a more society-focused, other-regarding judgment. Similarly, were we to have found evidence of an effect of sociotropic congruence, this could equally have been suggestive of citizens using a macro cue to infer how elected representatives are serving them and their families. As interest in the effects of ideological congruence grows in the coming years, we hope that individual-
level, cross-national data will become available that allow researchers to shed light on the role played by these micro mechanisms of self-interest and altruism.

The results pertaining to the direct effects of egocentric congruence corroborate and extend the approach taken by a small but growing number of published pieces that use similar (Curini et al. 2012) as well as different measures of egocentric congruence (Brandenburg and Johns 2014; Dahlberg and Holmberg 2014; Kim 2009; though for a contrary set of results see Singh et al. 2011). Stepping back and taking stock of these findings, it becomes clear that this emerging body of work on the attitudinal effects of ideological congruence also speaks directly to a more established line of research that finds repeated evidence for a positive relationship between descriptive representation and attitudes of political support, including political trust and external efficacy. Just as a match between the gender and race or ethnicity of individuals on the one hand and their elected representatives on the other has been found to boost positive feelings toward the workings of the political system, we find that matching on ideology – at least in egocentric terms – elicits similarly positive feelings in terms of citizen satisfaction.

It is also worth re-iterating that the relationship between egocentric congruence and citizen satisfaction withstands the inclusion of the control variable of being a national electoral winner. Given their conceptual similarities, there is good reason to believe that this variable, which has repeatedly been found to boost citizen satisfaction, would have swamped the individual-level effects of ideological congruence. That said, existing research has produced mixed results on this expectation (Curini et al. 2012; Dahlberg and Holmberg 2014; Kim 2009). Given the different measures of egocentric congruence we employed, coupled with the broad temporal and geographic coverage of our data, our findings advance

---

this line of research by providing solid evidence that ideological distance from both
government and legislature does indeed matter for individual voters above and beyond
having their preferred party sit in government. Put differently, winning and losing in the
electoral arena is of course a fundamental feature of democratic politics and as such a key
driver of citizen (dis)satisfaction; however, our results show that, regardless of who wins
and loses, the actual ideological make-up of the executives and parliaments formed after
votes have been tallied can independently boost or dampen positive feelings toward
democratic performance.

To date work on ideological congruence has ignored the conditioning effects of political
sophistication; the same holds more generally for work on descriptive representation. Our
findings regarding the moderating effects of education (which are similar to some findings
from extant work on economic voting (Gomez and Wilson 2001, 2006)) point, however, to
the analytic gains to be made from incorporating citizen heterogeneity more fully into
studies of political representation. As we noted in an earlier discussion, researchers
interested in exploring the conditional effects of congruence must contend with important
limitations of currently available data. As research on political representation takes citizen
heterogeneity increasingly into account, our hope is that cross-national survey programs, on
whose data this field of inquiry fundamentally relies, will regularly include a broader range
of questions that allow scholars to accurately tap normative dispositions and cognitive
capacities.

A final implication and limitation of the findings of this paper, also rooted in the
importance of taking heterogeneity seriously, is worth noting. Given our primary aim of
testing for the effects of a comprehensive range of congruence measures, the current study
was implicitly motivated by an assumption that all forms of ideological congruence would
have a uniform (albeit potentially also conditional) positive effect. As a result, we did not address theoretically why some forms of congruence might have a larger effect than others. However, our own analyses indicate that the direct and conditional effects of egocentric distance from government likely differ in size from those related to distance from legislature. A potentially important line of future research would therefore be to explore more systematically how and why the magnitude, and possibly even the sign, of direct and conditional effects vary across different types of egocentric and sociotropic congruence. This could be the case for voters taken as a whole or for population sub-groups such as ideological extremists or different types of national electoral winners and losers (Chang et al. 2014; Singh 2014). Observational data drawn from mass surveys offer a useful way to test for these effects, but experimental designs also provide a powerful set of tools for gaining analytic purchase on how different forms of congruence affect public opinion in different ways.

All in all, the results of this paper provide cause for optimism as well as reflection, both in terms of the actual functioning of representative democracy and given the dominant approach to studying ideological congruence within political science. On the one hand, our results relating to the effects of egocentric congruence provide support for the idea that representative democracy is working well. Citizens (albeit to varying degrees) are sensitive to the realities of the ideological menu before them and, as a result, are in a better position to take political action, electoral and non-electoral, in support of or against elected representatives. On the other hand, established research on ideological congruence primarily conceives of and measures congruence in sociotropic terms; yet we find no evidence that this form of representation affects how citizens judge their political system. This may well be because ideological congruence is simply too cognitively demanding to
assess from a sociotropic perspective. If this is true, sociotropic congruence may be analytically more useful for scholars interested in elite-mass linkage as an antecedent of substantive representation than for those focused on mass political behavior. Moreover, while sociotropic congruence measured in terms of the political left and right might fail to move citizens at the individual level, other types of sociotropic congruence could well impact how citizens think and act politically. This includes types of congruence that enjoy higher levels of popular visibility and salience, such as might be the case regarding the overlap in issue priorities between citizens and elites (see, e.g., Reher 2015; Brandenburg and Johns 2014).
References


Figure 1. Illustration of many-to-many congruence (Portugal 2009)

Figure 2. Relationship between sociotropic congruence and citizen satisfaction
Table 1. Citizen satisfaction and egocentric congruence

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximity to government</td>
<td>0.101***</td>
<td>0.0607***</td>
<td>0.0509***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.00468)</td>
<td>(0.00492)</td>
<td>(0.00546)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximity to legislature</td>
<td>0.0516***</td>
<td>0.0478***</td>
<td>0.0352***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.00534)</td>
<td>(0.00537)</td>
<td>(0.00596)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University educated</td>
<td>0.176***</td>
<td>0.177***</td>
<td>0.175***</td>
<td>0.276***</td>
<td>0.297***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0196)</td>
<td>(0.0197)</td>
<td>(0.0197)</td>
<td>(0.0454)</td>
<td>(0.0457)</td>
<td></td>
</tr>
<tr>
<td>National electoral winner</td>
<td>0.489***</td>
<td>0.547***</td>
<td>0.483***</td>
<td>0.543***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0171)</td>
<td>(0.0163)</td>
<td>(0.0172)</td>
<td>(0.0164)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximity to government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0485***</td>
</tr>
<tr>
<td>× university educated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.0115)</td>
</tr>
<tr>
<td>Proximity to legislature</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0679***</td>
</tr>
<tr>
<td>× university educated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.0139)</td>
</tr>
<tr>
<td>Intercept</td>
<td>1.679***</td>
<td>1.586***</td>
<td>1.470***</td>
<td>1.427***</td>
<td>1.478***</td>
<td>1.432***</td>
</tr>
<tr>
<td></td>
<td>(0.175)</td>
<td>(0.170)</td>
<td>(0.175)</td>
<td>(0.173)</td>
<td>(0.175)</td>
<td>(0.173)</td>
</tr>
<tr>
<td>Variance (country)</td>
<td>0.218**</td>
<td>0.212**</td>
<td>0.230**</td>
<td>0.228**</td>
<td>0.228**</td>
<td>0.226**</td>
</tr>
<tr>
<td></td>
<td>(0.0716)</td>
<td>(0.0690)</td>
<td>(0.0743)</td>
<td>(0.0731)</td>
<td>(0.0742)</td>
<td>(0.0729)</td>
</tr>
<tr>
<td>Variance (country-year)</td>
<td>0.0582***</td>
<td>0.0521***</td>
<td>0.0539***</td>
<td>0.0501***</td>
<td>0.0549***</td>
<td>0.0510***</td>
</tr>
<tr>
<td></td>
<td>(0.0150)</td>
<td>(0.0135)</td>
<td>(0.0140)</td>
<td>(0.0131)</td>
<td>(0.0142)</td>
<td>(0.0133)</td>
</tr>
<tr>
<td>Variance (university educated)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0205*</td>
<td>0.0206*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.00906)</td>
<td>(0.00908)</td>
</tr>
</tbody>
</table>

N (countries) 25 25 25 25 25 25
N (country-years) 59 59 59 59 59 59
N (individuals) 84,111 84,111 84,111 84,111 84,111 84,111

Notes: *** p < 0.001, ** p < 0.01, * p < 0.05 (two-tailed). Standard errors in parentheses. Controls include male, age, age^2, income, employment status, GDP growth rate, unemployment rate, and a post-communist dummy. The congruence measures have been coded such that higher values denote higher degrees of ideological matching. Sources: see appendix, Table A2.
## Table 2. Citizen satisfaction and sociotropic congruence

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute median citizen congruence (government)</td>
<td>-0.0660</td>
<td>-0.0783</td>
<td>-0.0736</td>
</tr>
<tr>
<td>(government)</td>
<td>(0.0452)</td>
<td>(0.0442)</td>
<td>(0.0449)</td>
</tr>
<tr>
<td>Absolute median citizen congruence (legislature)</td>
<td>0.00831</td>
<td>0.0403</td>
<td>0.0298</td>
</tr>
<tr>
<td>(legislature)</td>
<td>(0.133)</td>
<td>(0.130)</td>
<td>(0.132)</td>
</tr>
<tr>
<td>Many-to-many congruence (cumulative distribution)</td>
<td>-0.00165</td>
<td>-0.00177</td>
<td>-0.00195</td>
</tr>
<tr>
<td>(government)</td>
<td>(0.00239)</td>
<td>(0.00235)</td>
<td>(0.00237)</td>
</tr>
<tr>
<td>University educated</td>
<td>0.175***</td>
<td>0.173***</td>
<td>0.264*</td>
</tr>
<tr>
<td>(government)</td>
<td>(0.0196)</td>
<td>(0.0197)</td>
<td>(0.105)</td>
</tr>
<tr>
<td>National electoral winner</td>
<td>0.552***</td>
<td>0.550***</td>
<td></td>
</tr>
<tr>
<td>(government)</td>
<td>(0.0163)</td>
<td>(0.0164)</td>
<td></td>
</tr>
<tr>
<td>Median citizen congruence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(government)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>× university educated</td>
<td>-0.0248</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median citizen congruence (legislature)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>× university educated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Many-to-many congruence (cumulative distribution)</td>
<td>0.00135</td>
<td></td>
<td></td>
</tr>
<tr>
<td>× university educated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>1.332***</td>
<td>1.171***</td>
<td>1.181***</td>
</tr>
<tr>
<td>(government)</td>
<td>(0.236)</td>
<td>(0.235)</td>
<td>(0.236)</td>
</tr>
<tr>
<td>Variance (country)</td>
<td>0.204**</td>
<td>0.214**</td>
<td>0.210**</td>
</tr>
<tr>
<td>(government)</td>
<td>(0.0663)</td>
<td>(0.0686)</td>
<td>(0.0679)</td>
</tr>
<tr>
<td>Many-to-many congruence (cumulative distribution)</td>
<td>0.0478***</td>
<td>0.0452***</td>
<td>0.0462***</td>
</tr>
<tr>
<td>(government)</td>
<td>(0.0125)</td>
<td>(0.0119)</td>
<td>(0.0121)</td>
</tr>
<tr>
<td>Variance (university educated)</td>
<td>0.0175*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(government)</td>
<td>(0.00810)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N (countries)</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>N (country-years)</td>
<td>59</td>
<td>59</td>
<td>59</td>
</tr>
<tr>
<td>Observations</td>
<td>84,111</td>
<td>84,111</td>
<td>84,111</td>
</tr>
</tbody>
</table>

**Notes:** *** p < 0.001, ** p < 0.01, * p < 0.05 (two-tailed). Standard errors in parentheses. Controls include male, age, age², income, employment status, GDP growth rate, unemployment rate, and a post-communist dummy. The congruence measures have been coded such that higher values denote higher degrees of ideological matching. **Sources:** see appendix, Table A2.