

Who represents us? A Qualitative Comparative Analysis of ideology congruence in Latin America

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Abstract

The problem of representation has occupied the mind of political pundits for a long time, bringing a spread of studies on the determinants of ideological congruence between representatives and citizenry throughout the world. However, the common approach to this issue has been through quantitative studies based on regression analysis. This article presents a fuzzy-set Qualitative Comparative Analysis (fsQCA) to understand the puzzle of ideological congruence in Latin American countries. QCA is powerful to understand how independent variables combine in specific ways to produce a given outcome. This approach seems appropriate for research on congruence due to the combined effects of institutional variables such as number of parties and electoral systems' proportionality with both socioeconomic factors (education and inequality) and political features (compulsory vote and level of democracy). Stronger democratic institutions could give voters better choices of representation, fostering congruence. Compulsory vote, in turn, could help congruence as it brings more citizens to the polls. Nevertheless, when combined with low levels of education and complex institutions, compulsory voting could be harmful to congruence. The dependent variable is the same one used in the literature (ideology closeness in the left-right scale). Our preliminary results suggest that compulsory voting in conjunction with a high level of democracy and schooling leads to congruence. The number of parties does not seem to be important. However, disproportionality of the electoral system appears in some causal paths to congruence, adding up to previous evidence that challenged the superiority of Proportional Representation systems.

Keywords: ideological congruence; Latin America; Proportional Representation; compulsory vote.

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Introduction

Seen as an important expression of political representation, the ideology proximity between citizens and representatives has gained considerable attention of political scientists over the last few decades. This so-called ideological congruence literature has been mostly concerned with the effects of electoral systems on this closeness. In particular, Proportional Representation was proposed as an enhancer of congruence, but this effect has been challenged (GOLDER; STRAMSKI, 2010; BLAIS; BODET, 2006).

Whereas the literature is far from consensual on its most studied explanatory variable, the knowledge of other issues regarding the determinants of ideological congruence is even poorer. The impact of other institutional, socioeconomic and contextual variables, for example, is still a mystery, with little (if any) investigation to enlighten us about it. Additionally, presidential regimes and, together with them, whole regions of the world (namely Latin America) have been ignored by the bulk of empirical analyses on this issue.

This paper intends to collaborate to this literature by addressing all of those these deficiencies through a *Qualitative Comparative Analysis* (QCA) of ideological congruence in Latin American countries. We believe the investigation of new cases, with presidential regimes and, in many cases, compulsory voting, with a new method of comparison, could bring us new insights on the effects of electoral and party systems on political representation. QCA is a powerful tool to understand the *combination* of causal conditions to produce a given outcome, and it also allows for different *causal paths* (equifinality). For this reason it could be very useful to tackle the main issue on the literature, since the effects of electoral systems on congruence do not occur in a vacuum. To begin with, different levels of education or social inequality could make the effectiveness of Proportional Representation very different from one country to another. People with poor schooling might find it more difficult to identify candidates who are ideologically close to them. Moreover, other political institutions, such as the compulsory vote, could act as a confounding factor. Although it is not very common in the countries included in most studies of congruence, there is compulsory vote in countries like Belgium, which happens to be on the top of the list in terms of *number of parties*. Considering those studies do not have a large number of cases (usually around 20 or 30), even though they use quantitative analyses, one extreme case like Belgium could bias the analysis. That aside, it is important to understand compulsory vote effects on congruence if we are to understand representation in regions like Latin America, where this rule is widespread. Finally, we are concerned with the possible effects of democracy levels on congruence. We expect to find strong democratic institutions included as a condition in causal paths leading to congruence.

1 Literature Review

As already mentioned, most studies on ideological congruence are concerned with the effects of Proportional Representation (PR) and Majoritarian systems.

Lijphart (2012)'s famous claim of PR's superiority was reinforced by empirical studies that found a higher congruence on this type of political system (GOLDER; LLOYD, 2014, for a synthesis of that). However, these results were challenged in Blais e Bodet (2006) and Golder e Stramski (2010).

Blais e Bodet believe the dependent variable should be measured in a different way. Their operationalization relies on the subjective perception of each citizen on the parties' left-right position, where other studies relied on either the MPs self-placement or expert surveys (namely, the Political Manifesto Database). This *approach* is, indeed, interesting, since it brings us a precise information on how far a citizen could go, in her voting decision, from a party's ideological position as identified by herself. Nevertheless, one should pay attention to the fact that this measure has its own flaws. After all, one of the possible reasons for someone to vote on a candidate which is ideologically further is a lack of capacity to correctly identify the ideological position of the available candidates. This sort of limitation can play a decisive role in countries with low educational levels, especially when there is a high number of parties. Compulsory vote could make things even worse in this sense, since it brings people who do not care at all about the outcomes of elections to the polls. All of those features are very frequent in regions such as Latin America. Therefore, Blais e Bodet's measurement is not unequivocally superior, but it does have its advantages as it brings different informations, isolating flaws on people's perceptions from other sources of incongruence (such as a lack of ideologically proximate candidates)¹.

Before proceeding, we ought to highlight another contribution of those authors: their analysis is also careful to distinguish two steps (or levels) of representation: the citizen's and the voter's: the fact that some people do not go to the polls is already a first source of incongruence, since those people's ideological position is completely ignored from the start. Unfortunately, this simple reasoning goes unnoticed by most of the literature (Blais e Bodet themselves do not seem to give much importance to this issue). Golder e Stramski also depart from a new measurement of the dependent variable: the sum of the distance from the governments' to *all of the citizens'* positions, instead of the distance to the median voter. With this new conceptualization, they find that Majoritarian systems are *not* inferior to PR on what regards congruence ².

For Powell (2009), however, the different results presented by those papers is not an effect of different specifications of the dependent variable, but a matter of *time* differences: the Majoritarian systems presented, for unknown reasons, a *higher congruence* more recently than in past decades. To sustain his claim, he also presents different specifications of the dependent variable, as well as different datasets. Kim, Jr e Fording (2010) agree with Powell, adding that party polarization

¹ What is surprising here is that, if we consider all that has just been said, Blais e Bodet's results should point to an even better performance of Proportional Representation, since we should expect that, in such electoral systems, the poll of candidates is usually much more diverse than in a Majoritarian system, being this voter's misjudgement issue the main obstacle for a higher congruence.

² It should be noted that both these studies, like most of the empirical literature on congruence, exclude presidential regimes from their analyses.

is the key variable here to understand congruence, in general, as well as this temporal difference, in particular. They believe a decrease in polarization seen in Majoritarian systems in recent elections has effected a congruence increase.

Nonetheless, this debate is far from settled. [Golder e Lloyd \(2014\)](#) claim to have made statistical corrections on [Powell's](#) model and conclude that PR are no better than Majoritarian systems in terms of congruence.

The disagreements described above are, in part, due to the causal complexity involving electoral systems and representation. PR influences congruence directly and indirectly. [Blais e Bodet \(2006\)](#) had noted this when they explained that the similar levels of congruence they found between PR and majoritarian systems happens because the direct effect (translation of votes into seats) cancels out the indirect effects (a higher number of parties and their convergence to the center, raising congruence).

For this reason, the number of parties³ started to be included as an explanatory variable in congruence studies ([BELCHIOR, 2013](#); [KIM; JR; FORDING, 2010](#); [OOST, 2016](#); [RASMUSSEN; REHER; TOSHKOV, 2015](#), to name a few). But the effect of the number of parties is, itself, unclear (probably heterogeneous). More parties means more options, which brings a higher probability that the voters find one who better suits their ideology. However, a very large number of parties increases the aforementioned distortion between votes and seats ([POWELL, 2004](#)). This happens because smaller parties often fail to elect their candidates, leading to a "waste" of votes in a similar manner to what happens to Majoritarian elections.

In short, the effect of electoral systems on congruence is much more complex than some analyses seemed to realize, due to the different causal paths that could follow from the many different institutional configurations. Moreover, other confounding variables might play their role here. Cognitive skills are regarded as necessary for a proper voting decision by political scientists since the first studies on electoral behavior. Nevertheless, the damages of a low cognitive level could be higher in some electoral systems. In a Single Majoritarian District (SMD) election, with only two candidates and a convergence of candidates to the median voter position, it could be easier for voters to identify who is closer to them (and even if they do not, it is less likely that the candidate they choose is far way from their ideology than it could be in an election with many different candidates, some of them with more extremist ideologies). On the other hand, informed voters can take advantage of a Proportional Representation system with many different available candidates to vote for, increasing their individual congruence with their representatives.

When it comes to the effect of *other* political features on congruence, knowledge is sparse. [Blais e Bodet \(2006, p.29, footnote 8\)](#) briefly suggest the level of democracy as an explanatory variable for congruence, due to its potential to increase the "range of choices" on elections. However, as these authors acknowledge, their sample preclude them from assessing the effects of the quality of democracy on congruence, since almost all countries in it are highly democratic. They include

³ Often operationalized through the Effective Number of Parliamentary Parties, as developed by [Laakso e Taagepera \(1979\)](#).

a dummy variable for "old democracies" as a control variable, based on the following rationale (p.15): "in mature democracies parties benefit from a more stable partisan structure and have a better knowledge of their optimum strategy to assure concordance with voters' positions", leading to more compact party-systems and, consequently, better congruence.

Unfortunately, the effects of cognitive skills on congruence, so far, have been addressed by only a few studies. [McEvoy \(2012\)](#) performs a multilevel analysis, finding a positive correlation between political knowledge and congruence. [Belchior \(2013\)](#) also presents a multilevel analysis, with three levels (citizen, party and country). Her findings suggest that the "meso" level (parties) has the higher explanatory power. She includes political knowledge and educational level, at the individual level, in her analysis, but they are not statistically significant. None of those studies, however, search for *interactive effects* of educational levels with political systems⁴.

[Hooghe e Stiers \(2016\)](#) go to the individual level, but their aim is a macro-level variable: compulsory vote. They investigate whether "reluctant voters" (i.e., those would declare they would not be willing to vote if it was not mandatory) in two compulsory regimes (Australia and Belgium) present lower levels of congruence than other voters. They find positive evidence on that, but they also find that this effect is mediated by political knowledge and interest⁵.

We should also remember that none of the above-mentioned studies include Latin American countries in their analyses⁶. Fortunately, there is a growing literature addressing this region. [Otero e Rodriguez-Zepeda \(2010\)](#) performs a descriptive analysis (with the same data we use in the following investigation), identifying a high ideological congruence in Chile and Uruguay. In turn, [Luna e Zechmeister \(2005\)](#) has an explanatory goal, but with independent variables that are distinct from the literature and focused on economic context, such as "economic liberalization".

[Bêa et al. \(2012\)](#) could not go without mention, since it displays two features in common with this paper that other studies lack. First, instead of regression analysis, it performs a Qualitative Comparative Analysis. Second, the 33 countries in its sample include some Latin American countries. However, although they include electoral systems as an explanatory condition, it is mostly focused on socioeconomic variables. The main finding is that being a rich country is the most important explanatory condition for ideological congruence. We could ask whether education is not a better explanatory variable than wealth. Nevertheless, the innovations presented by [Bêa et al.](#) are very useful for the investigation we are proposing here.

[Lemes](#) also provides a QCA with countries of this region (together with a quantitative analysis), finding that literacy levels and Majoritarian Systems as part of the causal solutions for congruence.

⁴ Even if they had, the interactive term on regression is a substantially different approach from QCA's analysis of combined causal conditions, like explained by [Schneider \(2016\)](#).

⁵ Also on the effects of compulsory vote, a comparison between Swiss cantons showed a large negative effect of this rule on congruence ([SINGH, 2016](#)).

⁶ The only exception would be [Oost \(2016\)](#)'s inclusion of Mexico and Chile.

2 Research Design

The main gaps in the literature hereby described might help to explain the lack of consensus over the effect of electoral systems. Therefore, if we fill these gaps, we might help to solve this puzzle. First, studies with different countries, with different political, socioeconomic and cultural configurations, could enlighten us about different causal paths and heterogeneous effects of electoral systems on congruence. Secondly, a better understanding of other the effect of other variables, such as compulsory vote or educational level, could help as well, especially if we our research design is capable of investigating how the *conjunction* of those variables with the electoral system works. With all that in mind, we propose a Qualitative Comparative Analysis of congruence with 17 Latin American countries.

Our analysis is based on a fuzzy-set QCA, considering that our dependent variable, as well as many of our independent variables, is an interval-ratio variable. The data on congruence is from the survey with representatives conducted by the University of Salamanca, named *Elites Parlamentarias Latino-Americanas*. Data on socioeconomic variables is from the World Bank, data on the institutional variables is from the Quality of Government database, from the University of Gothenburg.

2.1 Hypotheses

Before proceeding, it is worth noting that QCA is not only for testing theories but also for exploratory analysis. Therefore, it will not come as a surprise if we find in the solution causal paths that were not specified here. We could propose other similar hypothesis (like number of parties together with high education as a path to congruence), but the causal conjunctions proposed in the hypothesis above are contemplating the main theoretical ideas we want to test here. With that caveat in mind, we can formulate some hypothesis:

H1: proportionality combined with democracy is a sufficient condition for the outcome (ideological congruence).

H2: a high number of parties combined with low educational level are sufficient conditions for the *absence* of the outcome.

H3: compulsory vote in conjunction with a high educational level is sufficient for congruence.

H4: compulsory vote together with low education is sufficient for the *absence* of congruence.

H5: high educational level is a *necessary* condition for the outcome.

H6: being democratic is a *necessary* condition for congruence.

H7: economic inequality is a *necessary* condition for congruence.

We believe that high proportionality together with a high level of democracy is sufficient for congruence. We do not include education here because education is not expected part of the solution including proportionality, since it is not proportionality, by itself, that brings complexity to elections, but the number of parties.

Thus, we formulate a second hypothesis where the lack education and the number of parties appear as a causal path to incongruence.

We formulate two propositions for compulsory voting: when combined with high education, it would be sufficient for congruence. Otherwise, it is sufficient for incongruence. In probabilistic approaches, that would be similar to proposing an interactive effect of education and compulsory vote where the former inverts the effect of the latter when its own level raises⁷

The proposition of education as a necessary condition for congruence seem to make sense because, whatever is the political system, voters need to be capable of identifying the better candidates. Nevertheless, that hypothesis might be rejected if, in some political systems, options are clear and voters can make their choices even though they have low educational skills. In turn, being democracy is expected to be a necessary condition because elements like free and competitive elections or freedom of speech are necessary for an election to be effectively representative. Economic equality is also proposed as a necessary cause for congruence, since inequality divides society in ways that could make it hard for the poor to select candidates who are ideologically close (that option might not even be available for them)⁸. The formulation of H5, H6 and H7 is equivalent to proposing that the lack of these three features would be sufficient to ideological *incongruence*.

2.2 Variables and Calibration

The dependent variable is the "citizen absolute congruence", one of the many conceptualizations of congruence in [Golder e Stramski \(2010\)](#), where:

$$\frac{1}{N} \sum_{i=1}^N |C_i - G| \quad (1)$$

N , therefore, is the number of citizens in the sample (i.e., in the opinion survey for each country); C is the ideological placement of each of those citizens, and G is the government position.

The calibration of the variables was made using [Ragin's](#) direct method⁹ The

⁷ We must remember the "assymmetrical" character of set-theoretic approaches like QCA. The analysis of an outcome and its absence should be proceeded separately, because the results are often different as well. Following the same logic, the hypothesis for congruence should also be different than those for incongruence. Nevertheless, there is some sort of "simmetry" between necessary causes for an outcome and sufficient causes for its opposite, and vice-versa. Therefore, a condition such as compulsory vote could be both in the solution for congruence and for its absence. Other conditions, like the effective number of parties or proportionality, might appear in a path to explain one outcome but not its opposite. That explains our different propositions in H1 and H2.

⁸ Alternatively, we could propose that facultative voting *plus* inequality are sufficient for incongruence, since very unequal countries with facultative votings have very low electoral representation of the poor due to their low turnout

⁹ In fuzzy-set QCA, we need to transform each variable to new values the range from 0 to 1. Being close to zero means no membership in the set of cases with a given feature, where the value approaches 1 it means it is closer to full membership and 0,5 is a "crossover point",

only exception is the variable "Compulsory Vote" which used what Ragin calls the "indirect method".

The threshold values were based both on a substantive criteria and a concern with a good distribution of scores around the range (as well as a good equilibrium between "more in than out" and "more out than in" values). Nevertheless, some important clarifications on the variables and the criteria for such thresholds need to be made before we proceed to the analysis. Tables with the raw values of each variable can be found in Appendix A.

ENPP - Effective Number of Parliamentary Parties - according to [Laakso e Taagepera \(1979\)](#) formula. Our anchor for non-membership is 2, since it is the approximate ENPP for bipartisanship systems. For full membership, we set the threshold of 7.5, since the vast majority of countries not only in Latin America but also in the rest of the planet do not reach that number (Colombia has a value of 7.19). Only Brazil (here, with a value of 9.32) and Belgium are systematically beyond that threshold (other countries reach that level only in some elections). For the crossover point, we set the value of 3.5 since, considering that an *effective* number of parties above this value means a country has 4 or more disputing parties and, at least, 3 effective contenders.

Proportionality - based on the Least Squares Index, a formula developed by [Gallagher \(1991\)](#) and measures the degree of disproportionality between seats and votes on electoral systems. It can take values from 0 (perfect proportionality), to 100 (most disproportional). Our thresholds follow [Bêta et al. \(2012\)](#) definition: 1 for full membership and 10 for no membership. As this author explains, countries with these values are considered, respectively, very proportional (Denmark and Netherlands are his examples, but we could mention Uruguay, in our set); and "typical plurality systems", like UK and Canada (the highest value in our set is that of Peru (10.23)). Our crossover value is slightly different from [Bêta et al.](#)'s (while he sets it as 7, considering that this is the value of the "most disproportional PR electoral systems"), because that makes our set more evenly distributed between cases above and below a 0.5 score (without being considerably questionable from a substantive, theoretical viewpoint).

Level of democracy - we used the Democracy Index developed by the [Economist Intelligence Unit](#). Just like any alternative measure of democracy (Freedom House or Polity), its methodology can be questioned. Nevertheless, it seems suitable to our purposes, as it considers a wide range of political features. Here, we use 8.5 as our anchor for full membership, given that few countries in the world reach that point (especially in regions such as Latin America) and the EIU conceptualization itself places countries above 8 as full democracies. Our non-membership threshold is

dividing cases that are "more in than out" from the ones that are "more out than in" this set. There are different ways to perform this transformation. In the direct method, the researcher determines threshold values from the original variable for full membership, no membership and for the crossover point and perform calculations based on a likewise logistic function to reach values in the range of fuzzy-sets. These thresholds should have a substantive meaning of what it means to be "in" or "out" that set. For other formulae to calibrate fuzzy-set scores, see [Ragin \(2007\)](#) and [Thiem e Dusa \(2012\)](#), which proposes alternatives to the likewise logistic function used by Ragin.

4 (the threshold that EIU uses to divide hybrid from authoritarian regimes), while 6.2 is our crossover point, slightly higher than EIU's threshold from hybrid regimes to flawed democracies (to gain more equilibrium between the "more in than out" and its opposite on our set).

Compulsory Vote - based on the [British Electoral Commission \(2006\)](#) categorization of countries' level of enforcement of compulsory vote, that goes from "very strict" (score of 1.0) to "none" (score of 0.2 - these are countries that have a compulsory voting law but with no enforcement; the score of 0.2 is given to countries with no compulsory voting rule at all). A simple dichotomization would not let us capture these meaningful differences in enforcement.

Inequality - measured by the Gini coefficient. Defining threshold values for this variable was tough, since the levels of inequality are fairly similar among Latin American countries and relatively high in comparison to other parts of the world. Therefore, we set the no-membership anchor as 40 (closest to the value of our less unequal country, Panama), the full-membership as 65 and the crossover as 50. This definition yielded a fairly equilibrated fuzzy-set.

Education - the scores were based on the average schooling years for people above 25 years old (data from the World Bank). The qualitative anchors were 3.5 (no-membership), 7.1 (crossover) and 10 (full-membership).

Abbreviations for the tables:

- Proportionality = Proport
- Democracy Level = Democ
- Compulsory Vote = Comp
- Effective Number of Parliamentary Parties = ENPP
- Inequality = Inequality
- Education = School

For the absence of a condition, we use the symbol ~before the label (disproportionality of the electoral system is represented by "~Proport", and so on).

3 Results

First, we present the solutions for a truth table algorithm¹⁰. In table 1, we can see the solution for congruence. The main results suggest that a high disproportionality of the electoral system combined with facultative vote, or a high democratic level combined with high school levels and compulsory vote are both sufficient conditions for ideology congruence.

¹⁰ All of the analysis presented below were performed through the software fsQCA 3.0.

The first path goes against the superiority of Proportional Systems (it also opposes H1 above). It also poses a puzzle regarding the conjunction of electoral systems with compulsory vote: why would facultative voting cause congruence when combined with low proportionality? This idea of a relevant conjunction of compulsory/facultative vote with electoral systems is strengthened by the evidence in Table 2: facultative voting with proportional systems leads to incongruence, as we see in its first path.

In turn, the second path is favourable to H3. It is easy to interpret as well. Schooling joined with compulsory vote creates congruence because it guarantees both high turnout and more precise voting decisions. The inclusion of democracy in this specific path might not be so straightforward, but it suggests that not only should elections be efficient from the voters' side (cognitive ability + turnout) but also from the part of the system in order to bring representativeness.

But if the second path in Table 1 makes more sense from a substantive point of view, the empirical results are more strong for the first path. Both its coverage and consistency are higher than in path two.

The solution for the absence of the outcome (Table 2) is much less parsimonious. We had to take a decision on prime implicants (we dropped two prime implicants in which "school" was a causal condition).

In Table 2, we can see Proportionality in two different paths: the first, as already mentioned, combined with facultative voting; the second with inequality. This was not predicted by our hypothesis. Inequality also comes together with a low number of parties. These two paths are quite distinct from our hypotheses, and it seems hard to make sense of both of them at the same time: why would inequality bring incongruence when allied with proportional systems but also with a *low* number of parties? The latter makes sense if we think that having a short range of choices (low ENPP) together with a unbalanced socioeconomic reality would make it hard for voters (especially from the lower class) to find a proper representation¹¹.

The last path in table 2 conjoins poor democratic institutions and, again,

¹¹ Maybe there is a causal link between inequality, populism and poor ideological congruence, but other mechanisms might explain this causal path, like a hardness from parties that represent the lower classes to reach power - but that does not seem to be the case in America Latina, especially when it comes to countries like Bolivia, which is covered by this solution

Tabela 1 – Solution for Congruence

	<i>Raw Cov.</i>	<i>Unique Cov.</i>	<i>Consist.</i>	<i>Countries Covered</i>
~Proport * ~Comp	0.577	0.315	0.837	Honduras, Venezuela, Costa Rica, Paraguay Panama
Democ * School * Comp	0.458	0.196	0.792	Uruguay, Chile, Dominican Rep.
TOTAL	0.773		0.800	

compulsory voting. Just like proportionality, it looks like the level of democracy holds an "inversion" power over the effect of compulsory voting on ideological representation. Forcing people to vote could make them even less represented if the institutions (and the elections themselves) are flawed. Now, we examine the cases that produced these results with XYPlots.

Tabela 2 – Solution for Absence of Congruence

	<i>Raw Cov.</i>	<i>Unique Cov.</i>	<i>Consist.</i>	<i>Countries Covered</i>
Proport* ~ Comp	0.592	0.113	0.770	Colombia, Ecuador, México, Nicaragua, Guatemala, Argentina
Inequality * Proport	0.648	0.067	0.785	Bolivia, Mexico, Brazil, Colombia, Guatemala, Peru
Inequality * ~ ENPP	0.579	0.038	0.752	Mexico, Bolivia, Peru, El Salvador
~Democ * Comp	0.382	0.009	0.837	El Salvador, Bolivia, Peru
TOTAL	0.877		0.766	

In Figure 1 we can see the relationship of electoral systems and number of parties with congruence. We preferred to use the inverted versions of the variables ("~Proportionality" and "~ENPP") because, especially in the first case, it is easier to visualize some patterns this way.

In the upper-left, in red, we can see Uruguay, the case that better fits Lijphart's and others authors' claims on the superiority of Proportional Representation. It is also the stronger contradiction to the results of the above analysis, where the text absence of proportionality brings congruence. In turn, The groups of countries displayed in red dots, in the bottom-left of the graphic, fits very well the theory of *less proportionality, more congruence*. This group is constituted by Nicaragua and Argentina (closer to the center of the graphic), Colombia, Brazil and Bolivia (in the middle) and finally Ecuador (right in the beginning, with the lowest values in both variables).

Looking at the plot for ENPP, we can hardly see any pattern here. However, it might help us explain the results commented above. For example, Uruguay is right next to the line, in the upper-right, displaying high congruence with a very low number of parties. The conjunction of a very high proportionality with a very low number of parties (which might be atypical in other regions, but not in Latin America), seemed to work very well for this country (but not for Ecuador, a country with very similar values in both conditions, but with a very low congruence in our sample). Brazil and Colombia are again very close to each other. Their highly proportional systems did not yield good results in terms of ideological representativeness.

When it comes to the socioeconomic variables of our analysis, one more time, we find Brazil and Colombia tied, in the bottom left, next to Bolivia: very unequal

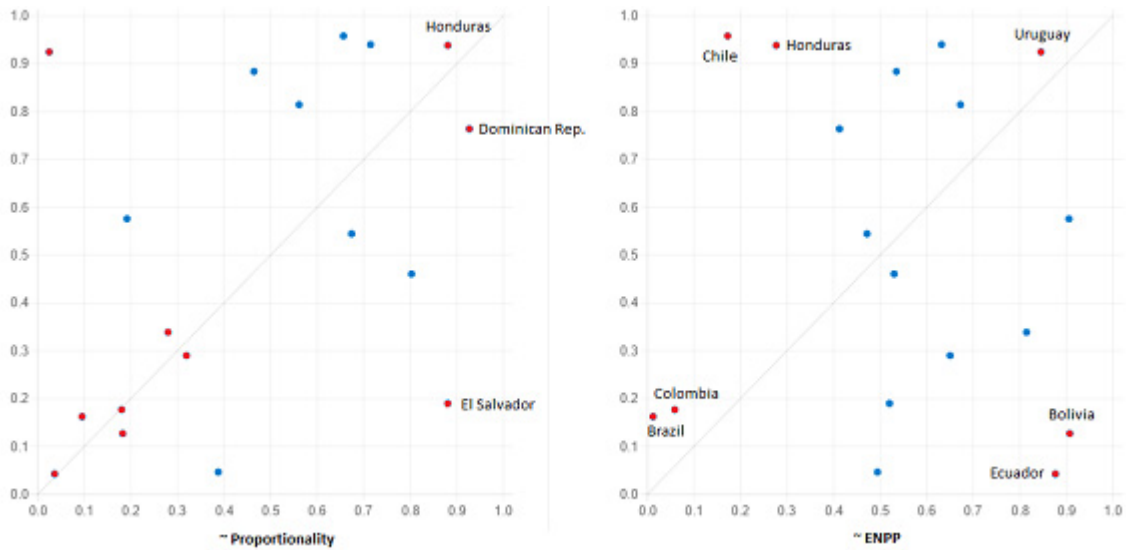


Figura 1 – XY Plots - Congruence X Party System

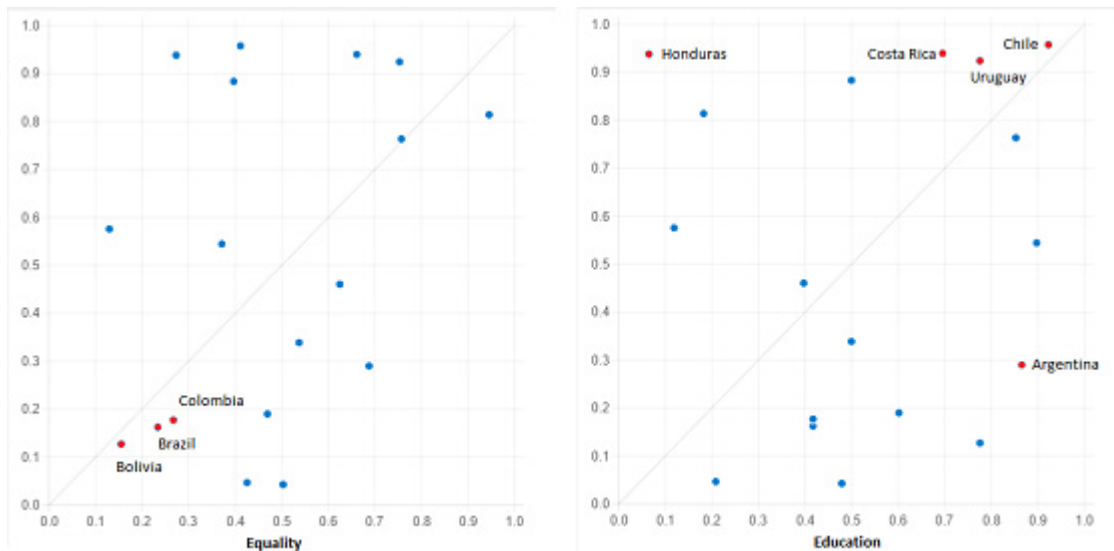


Figura 2 – XY Plots - Congruence X Socioeconomic Conditions

countries, with very low ideological congruence. However, this pattern is not so clear when we look at the big picture. The Education plot shows Chile, Uruguay and Costa Rica with the expected correlation, but that does not happen Argentina, with one of the highest educational levels of the region. The fairly high congruence in Honduras, so far, could only be explained by its low proportionality, since its educational level is the worst among our cases.

The plot for democracy, in turn, presents a very straightforward relationships. In the upper-right corner, again, we can see the "holy trinity" of political development in Latin America: Chile, Uruguay and Costa Rica, displaying the highest levels of both democratic level and ideological congruence. Our stronger

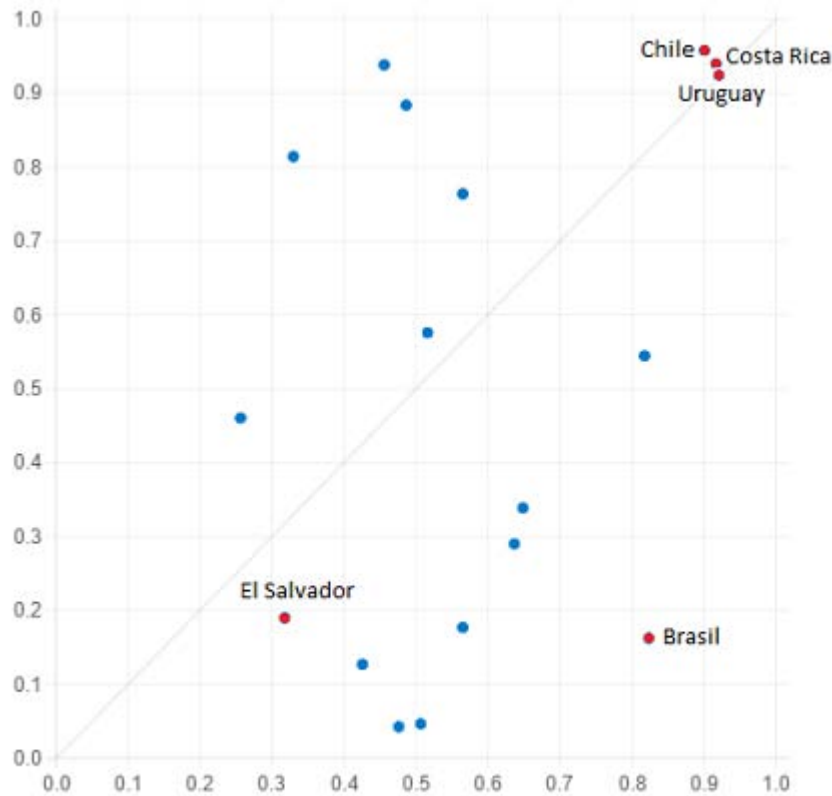


Figura 3 – XY Plot - Congruence X Democracy

outlier, in turn, is Brazil, standing at the bottom-right, with a fairly good level of democracy but poor ideological representation. This could be easily explained by the high inequality level of this country and, maybe, by its strong proportional system. Moreover, apart from Brazil and other smaller contradictions, the correlation between democracy and congruence seems to be the closest to a linear correlation among the variables addressed in this paper.

3.1 Necessary Causes

As for the necessary causes, results were a little frustrating. In Table 3 No condition reached the conventional threshold of 0.9 of consistency, indicating that no cause, on its own, is necessary for congruence. Therefore, the hypotheses of education (H5), democracy (H6) and economic equality as necessary causes should be rejected. The consistency for each of those three conditions was, respectively, 0.69; 0.791 and 0.698. The other conditions were also tested, but their consistency remained always below 0.70 ¹².

¹² The three conditions that we suggested as necessary in our hypothesis were presented in the top of the table, before the tests for the party-system variables. At the end of the table, we included some "non-sense" necessary conditions for congruence (no democracy, no schooling and

Tabela 3 – Test for Necessary Causes of Congruence

	<i>Consistency</i>	<i>Coverage</i>
\sim Inequality	0.697712	0.744305
School	0.690891	0.655479
democracy	0.791724	0.687882
ENPP	0.623469	0.697002
\sim ENPP	0.671353	0.629538
Proportionality	0.558210	0.526011
\sim Proportionality	0.708684	0.787680
Compulsory	0.517215	0.641581
\sim Compulsory	0.684859	0.593072
\sim democracy	0.536699	0.662620
Inequality	0.617886	0.603686
\sim School	0.583889	0.643830

Tabela 4 – Necessary Conjunctions of Causes for Congruence

	<i>Consistency</i>	<i>Coverage</i>
\sim Inequality+School+democracy	0.892322	0.637759
\sim Inequality+School+democracy+ \sim Proportionality	0.938598	0.624399
\sim Inequality+School+democracy+ \sim Compulsory	0.953935	0.577564
\sim Inequality+School+democracy+ENPP	0.921444	0.619617

In Table 4 we test for groups of SUIN conditions (i.e., Sufficient but Unnecessary causes of a condition that is itself a Insufficient but Necessary for the outcome). If we combine schooling, education and democracy, we reach a consistency of 0.892, very close to the 0.9 threshold. Adding political variables that were part of causal paths in the analysis above, we transcend the 0.90 threshold. But that is in part an effect of adding many variables in the analysis.

4 Discussion

The results presented here show us the number of parties might not be a meaningful explanation for congruence (or its lack thereof). The degree of proportionality in the electoral system, however, can make a difference, but not on the direction that many scholars would expect (but not an entirely new finding in Latin America, since [Lemes](#)). Our analysis, therefore, favours the claims of no-superiority or even inferiority of proportional systems. But this analysis is limited in the number of cases (and we ought to remember here that by "cases" we mean country-period, because these same countries might have had different values of congruence, number of parties or even proportionality in the past). As with [GOLDER e FERLAND \(2016\)](#) and [Blais e Bodet \(2006\)](#), time might have favoured the "non-proportionality congruence"thesis here. Different results could be reached had we used other calibration anchors.

inequality)

Thus, this study is only a small step. Additionally, QCA analysis needs to be understood in addition with other methodologies, be them either case studies or quantitative analysis (SCHNEIDER; WAGEMANN, 2010). Nevertheless, we believe to have fulfilled the promise of making an innovative contribution to the congruence literature by posing new questions, with a rarely studied set of countries and an equally rarely used method.

Among the questions that could deserve a further exploration, is the one posed by the conjunction of proportional systems with facultative voting. Large-N analysis (either with QCA or with statistical techniques) could help us confirm their impact on congruence. Case studies and theoretical debates, in turn, could help us understand the mechanisms behind it. What could possibly make facultative voting raise congruence in disproportional electoral systems? Facultative vote tend to lead more politically voters to the polls. But the relationship of that with proportionality remains unclear.

The relationship of the level of democracy, in turn, is a less complex one. Democracy and representation are so intertwined that some scholars believe congruence itself should be included as a measure of democracy (BLAIS; GUNTERMANN; BODET, 2016). Notwithstanding, further analysis could disaggregate Quality of Democracy indexes into more specific variables, in order to understand what features of democracy are important for congruence. Our guess is that makes elections effective would foster congruence. Competitive elections broadens the range of true choices to voters; freedom of speech makes elections more transparent and could help voters identify the closer candidates among these choices, and so on. The rule-of-law, on the other hand, could not be much important to congruence (although it is very important to democracy itself). But one cannot be sure about that: vote-buying might preclude fair elections, for example. Therefore, this sort of investigation could be helpful.

When it comes to the effect of schooling, this paper is not the first one to question it. We could have tried different calibration anchors or even different data. We could also include other measurements of cognitive skills, such as political knowledge (but this variable was also to be ineffective to congruence in previous studies, as already mentioned). Nevertheless, what QCA results show is the impact of a condition *in conjunction* with others. If education is not a necessary cause of congruence, according to our analysis, it could be due to the fact that, in some polities, the choices are straightforward. We should also remember that schooling combined with compulsory vote (and democracy) did produce positive results here. This issue also deserves more investigation, since the cognitive skills of voters is a critical issue for the compulsory voting debate.

Referências

- BELCHIOR, A. M. Explaining left–right party congruence across european party systems: a test of micro-, meso-, and macro-level models. *Comparative Political Studies*, SAGE Publications Sage CA: Los Angeles, CA, v. 46, n. 3, p. 352–386, 2013. Citado 2 vezes nas páginas 4 e 5.
- BÎEA, N. et al. (in) congruence: a study of opinion-policy distance in 33 democracies. *CEU Political Science Journal*, Central European University (CEU)-Department of Political Science, n. 03, p. 290–324, 2012. Citado 2 vezes nas páginas 5 e 8.
- BLAIS, A.; BODET, M. A. Does proportional representation foster closer congruence between citizens and policy makers? *Comparative Political Studies*, Sage Publications Sage CA: Thousand Oaks, CA, v. 39, n. 10, p. 1243–1262, 2006. Citado 4 vezes nas páginas 2, 3, 4 e 14.
- BLAIS, A.; GUNTERMANN, E.; BODET, M. A. Linking party preferences and the composition of government: A new standard for evaluating the performance of electoral democracy. *Political Science Research and Methods*, Cambridge Univ Press, p. 1–17, 2016. Citado na página 15.
- British Electoral Commission. Compulsory voting around the world–research report. *Executive Summary*, London, 2006. Citado na página 9.
- Economist Intelligence Unit. *Democracy Index*. <http://www.eiu.com/topic/democracy-index/>. Accessed: 2017-04-20. Citado na página 8.
- GALLAGHER, M. Proportionality, disproportionality and electoral systems. *Electoral studies*, Elsevier, v. 10, n. 1, p. 33–51, 1991. Citado na página 8.
- GOLDER, M.; FERLAND, B. Electoral rules and citizen-elite ideological congruence. 2016. Citado na página 14.
- GOLDER, M.; LLOYD, G. Re-evaluating the relationship between electoral rules and ideological congruence. *European Journal of Political Research*, Wiley Online Library, v. 53, n. 1, p. 200–212, 2014. Citado 2 vezes nas páginas 3 e 4.
- GOLDER, M.; STRAMSKI, J. Ideological congruence and electoral institutions. *American Journal of Political Science*, Wiley Online Library, v. 54, n. 1, p. 90–106, 2010. Citado 3 vezes nas páginas 2, 3 e 7.
- HOOGHE, M.; STIERS, D. Do reluctant voters vote less accurately? the effect of compulsory voting on party–voter congruence in australia and belgium. *Australian Journal of Political Science*, Taylor & Francis, p. 1–20, 2016. Citado na página 5.
- KIM, H.; JR, G. B. P.; FORDING, R. C. Electoral systems, party systems, and ideological representation: an analysis of distortion in western democracies. *Comparative Politics*, City University of New York, v. 42, n. 2, p. 167–185, 2010. Citado 2 vezes nas páginas 3 e 4.

- LAAKSO, M.; TAAGEPERA, R. “effective” number of parties: a measure with application to west europe. *Comparative political studies*, Sage Publications Sage CA: Los Angeles, CA, v. 12, n. 1, p. 3–27, 1979. Citado 2 vezes nas páginas 4 e 8.
- LEMES, L. S. Congruencia ideológica y receptividad democrática en américa latina. un análisis sobre su medida, variación y principales determinantes causales. 2015. Citado 2 vezes nas páginas 5 e 14.
- LIJPHART, A. *Patterns of democracy: Government forms and performance in thirty-six countries*. [S.l.]: Yale University Press, 2012. Citado na página 3.
- LUNA, J. P.; ZECHMEISTER, E. J. Political representation in latin america a study of elite-mass congruence in nine countries. *Comparative political studies*, Sage Publications, v. 38, n. 4, p. 388–416, 2005. Citado na página 5.
- MCEVOY, C. Unequal representation in the eu: A multi-level analysis of voter-party congruence in ep elections. *Representation*, Taylor & Francis, v. 48, n. 1, p. 83–99, 2012. Citado na página 5.
- OOST, M. *Effect of Electoral Systems on the Quality of Political Representation*. Dissertação (Mestrado) — University of Twente, 2016. Citado 2 vezes nas páginas 4 e 5.
- OTERO, P.; RODRIQUEZ-ZEPEDA, J. Measuring representation in latin america: A study of the ideological congruence between parties and voters. 2010. Citado na página 5.
- POWELL, B. G. The ideological congruence controversy: The impact of alternative measures, data, and time periods on the effects of election rules. *Comparative Political Studies*, Sage Publications Sage CA: Los Angeles, CA, v. 42, n. 12, p. 1475–1497, 2009. Citado 2 vezes nas páginas 3 e 4.
- POWELL, G. B. Political representation in comparative politics. *Annu. Rev. Polit. Sci.*, Annual Reviews, v. 7, p. 273–296, 2004. Citado na página 4.
- RAGIN, C. C. Fuzzy sets: calibration versus measurement. *Methodology volume of Oxford handbooks of political science*, v. 2, 2007. Citado 2 vezes nas páginas 7 e 8.
- RASMUSSEN, A.; REHER, S.; TOSHKOV, D. Political institutions and policy representation in europe. 2015. Citado na página 4.
- SCHNEIDER, C. Q. Real differences and overlooked similarities: Set-methods in comparative perspective. *Comparative Political Studies*, SAGE Publications Sage CA: Los Angeles, CA, v. 49, n. 6, p. 781–792, 2016. Citado na página 5.
- SCHNEIDER, C. Q.; WAGEMANN, C. Standards of good practice in qualitative comparative analysis (qca) and fuzzy-sets. *Comparative Sociology*, Brill, v. 9, n. 3, p. 397–418, 2010. Citado na página 15.
- SINGH, S. P. Elections as poorer reflections of preferences under compulsory voting. *Electoral Studies*, Elsevier, v. 44, p. 56–65, 2016. Citado na página 5.

THIEM, A.; DUSA, A. *Qualitative comparative analysis with R: A user's guide*. [S.l.]: Springer Science & Business Media, 2012. Citado na página 8.

5 Appendix A - Descriptive Statistics

	<i>Congruence</i>	<i>Gini</i>	<i>Years of School</i>	<i>Democracy Level</i>	<i>LSq Index</i>	<i>ENPP</i>	<i>Compulsory</i>
Argentina	1.183542	47.37	8.9	6.63	4.99	3.19	0.4
Bolivia	1.475713	58.47	8.3	5.98	4	2.36	0.8
Brazil	1.39469	55.93	6.7	7.38	3	9.32	1
Chile	0.169288	51.79	9.5	7.89	7.08	5.59	0.6
Colombia	1.365563	55.04	6.7	6.4	3.98	7.19	0
Costa Rica	0.260115	47.77	7.9	8.04	7.53	3.23	0
Dominican Republic	1.811511	49.96	7	6.13	1.63	2.52	0.2
Ecuador	1.340835	50.61	7.5	5.64	9.33	3.46	0.6
El Salvador	1.784555	51.5	5.5	6.22	5.39	3.53	0.2
Guatemala	0.2666264	54.89	3.9	6.07	9.33	4.78	0
Honduras	0.8555918	59.51	4.7	6.25	4.08	2.37	0.2
Mexico	1.119362	49.5	7.1	6.67	4.74	2.76	0.2
Nicaragua	0.5701305	40.49	5.3	5.68	6.41	3.14	0
Panama	0.8863812	52.63	9.2	7.35	7.21	3.65	0.4
Paraguay	0.4363423	52.09	7.1	6.16	5.81	3.43	0.6
Peru	0.6443589	46.21	8.8	6.4	10.23	3.97	1
Uruguay	0.319554	46.28	8.3	8.08	1.1	2.65	1
Venezuela	0.9748416	48.3	6.6	5.42	8.34	3.44	0.2