## Louisiana State University **LSU Digital Commons**

LSU Master's Theses Graduate School

2017

# National Electoral Winners and Losers: Satisfaction with Democracy Predicated on Institutional Context

Casey Newman Knott

Louisiana State University and Agricultural and Mechanical College, cnknott89@gmail.com

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool\_theses



Part of the Political Science Commons

#### Recommended Citation

Knott, Casey Newman, "National Electoral Winners and Losers: Satisfaction with Democracy Predicated on Institutional Context" (2017). LSU Master's Theses. 4609.

https://digitalcommons.lsu.edu/gradschool theses/4609

This Thesis is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Master's Theses by an authorized graduate school editor of LSU Digital Commons. For more information, please contact gradetd@lsu.edu.

# NATIONAL ELECTORAL WINNERS AND LOSERS: SATISFACTION WITH DEMOCRACY PREDICATED ON INSTITUTIONAL CONTEXT

#### A Thesis

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Master of Arts

in

The Department of Political Science

by Casey Newman Knott BA, Southeastern Louisiana University, 2012 August 2017

# Table of Contents

Al	ostract	iii
1	Introduction	1
2	Theoretical Development	6
3	Data and Measurement	15
4	Analysis	24
5	Conclusion	31
Re	eferences	35
Aŗ	ppendix	42
Vi	ta	49

### Abstract

How does being an electoral winner or loser shape a citizen's satisfaction with democracy? More importantly, how does the voter's institutional context moderate this relationship? In this paper, I demonstrate that the institutional context of a democracy interacts with a citizen's national- level electoral loser status to moderate the relationship between the individual's status as a loser and her satisfaction with democracy in her country. I also explore the way winning and losing at different levels of representation interact to formulate satisfaction with democracy. Using cross-sectional survey data from the Comparative Study of Electoral Systems nested in 75 different country-election year cases over the time period of 1996 to 2012, I find mixed evidence that electoral losers are more likely to be satisfied with democracy when their chosen party is more favored by the party vote/seat share discrepancy. Unlike losing voters, winning voters do not appear to be more or less likely to be satisfied based on the vote/seat discrepancy. I also find mixed support for the idea that winning at the national level produces greater satisfaction than winning at the district level.

#### 1 Introduction

In what ways do a democracy's electoral institutions affect attitudes about the democratic process among the winning and losing voters of an election? Additionally, do winning and losing at different levels of representation also have an effect? Democratic systems of representation and their implications for voter behavior have long been an important topic of study in the field of comparative political science research, among others (Fishburn and Gehrlein, 1977; Powell, 1986, 1989; Nadeau and Blais, 1993). More broadly, we know that a nation's political institutions "matter" as they are the key design component for the formation of a democracy (Evans, Rueschemeyer and Skocpol, 1985; Weaver and Rockman, 1993; Sartori, 1997; Taagepera, 2002). Part of the reason institutions matter is that they structure the way representatives are elected by the mass public. Indeed, Arend Lijphart (2012) posits that the two concerns at the heart of democracy pertain to who will do the governing and whose interest will be responded to in the case of disparate preferences among the people. However, there are a wide variety of electoral contexts present across the world through which countries have answered these questions. A substantial body of previous research suggests that proportional systems of representation tend to be positively associated with aggregate citizen satisfaction with the way democracy works in their country (Anderson and Guillory, 1997; Lijphart, 1999; Klingemann, 1999; Powell, 2000; Karp and Banducci, 2008). However, there is a lack of work studying the variations in the propensity toward satisfaction with democracy among the citizens both within and across PR systems.

While there have been a number of studies on the topic of institutions and satisfaction with democracy, most of this empirical work has been concentrated on electoral system characteristics and whether the voter is an electoral winner or loser. This has left a lacuna in the literature in terms of citizen satisfaction with democracy predicated on the real electoral outcome vis-à-vis how voters are allocated representation in government via their preferred

<sup>&</sup>lt;sup>1</sup>Some recent work indicates possible limitations upon the extent to which electoral contexts contribute to citizens' assessments of the democratic process (e.g. Donovan and Karp, 2016)

party.<sup>2</sup> Investigating this gap is helpful as it has the potential to reveal substantive unexplored variations in citizens' likelihood of satisfaction with democracy as it operates in their country. Taking a more nuanced approach than the extant literature, I argue that not all losing voters are the same. In this paper, I demonstrate that losing voters who are allocated a greater share of seats than votes are more likely to be satisfied than those losing voters who are allocated an equal or lesser share of seats than votes. I also demonstrate that a gap in the likelihood of satisfaction is present for citizens who lose at different levels of representation (district- and national-level), which sets them apart from citizens who win representation in at least one level, as well as those who win representation at both.

This study is motivated by research that suggests that dissatisfaction with democracy among a citizenry can undermine the legitimacy, as well as the stability of that democracy (Lipset, 1959; Easton, 1965; Powell, 1982, 1986; Anderson and Mendes, 2006). And while much of the extant literature theorizes the importance of citizen satisfaction for system legitimacy and stability, it has done little to empirically established a causal link between these things. There is evidence to suggest that, in addition to the character of the transition process from a non-democratic regime to a democratic one, institutional structures are vital to the democratic consolidation in transitional states (Evans and Whitefield, 1995). Evans and Whitefield also emphasize the important role played by citizens' experience with democratic system norms and processes. These authors argue that, in transitional democracies, the key elements that comprise public support for the new democratic system are the performance of new political institutions and the ability of electors to be heard via the party and electoral system. Satisfaction with the democratic system is just as important in established democracies: satisfied citizens will be less likely to participate in pushes for radical

<sup>&</sup>lt;sup>2</sup>A notable exception to this is an article by Blais, Morin-Chassé and Singh (2015). However, this study's scope is limited to Canada, France, Germany, Spain, and Switzerland. It also controls for vote and seat shares rather than using the actual differential for the party for which each voter cast his or her vote. Additionally, it does not account for any possible interactive relationship between differential and winner/loser status. It should also be noted that Howell and Justwan (2013) have studied satisfaction based on real-world electoral outcomes. In this case, however, the authors focused on satisfaction as predicated on the winner's margin of victory.

political change (Bernauer and Vatter, 2012). Furthermore, extant scholarship has linked power-sharing democratic institutions with greater satisfaction with democracy, while also evidencing a causal relationship between greater levels of satisfaction and greater levels of political engagement (Kittilson and Schwindt-Bayer, 2010). Additionally, they will be more likely to participate in the democratic process at the ballot box(Grönlund and Setälä, 2007). Given that citizen participation is the bedrock of democracy, understanding the way electoral institutions and democratic performance formulate satisfaction, which in turn, affects participation, is key for structuring a democratic government.

In this paper, I make the theoretical argument that while winners and losers have a satisfaction gap between them, not all losers are alike, nor are all winners. The institutional rules present in a country dictate the way in which votes are translated into seats. This calculation determines the proportionality of party vote and seat shares, and, in turn, it determines the level of benefit or detriment experienced by a party in terms of the discrepancy between those shares. Parties that receive a smaller share of seats than votes are the victims of this discrepancy. More importantly, voters are the real victims as they are less represented than their vote share indicates they should be. Thus, I make the case that voters, particularly those that lost, will have a higher likelihood of being satisfied with the way democracy works if they are the beneficiary of party vote/seat share discrepancy.<sup>3</sup> This approach is a novel one in that it provides a more nuanced understanding of the way electoral structures, particularly disproportionality, contribute to the way citizens feel toward their country in terms of its version of democracy. Indeed, it allows us to see how likely it is that people are satisfied based upon the interplay of voter returns and a crucial electoral rule that translates the will of those people in the form of those votes into a representative body which will then act on their behalf. Such specificity has largely been lacking in previous studies.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup>A beneficiary of party vote/seat share discrepancy is a voter whose chosen party received a more favorable proportion of seats to votes. Alternatively, a victim of vote/seat share discrepancy is a voter whose chosen party received a less favorable proportion of seats to votes.

 $<sup>^4</sup>$ As mentioned above, Blais, Morin-Chassé and Singh (2015) and Howell and Justwan (2013) are exceptions to this, as they are more nuanced than much of the extant literature.

I also make the argument citizens' partisan congruence across different levels of representation matters. That is to say that there is a difference in satisfaction for citizens based on the different levels of representation in which citizens can win or lose. The structure of many political systems attributes representation to people based on their particular geographic region (or district), and the resulting representation then forms the makeup of their national-level government. Citizens who lose at both the district level and the national level will be unrepresented or underrepresented when compared to their counterparts who won representation in at least one level. Winning at both levels should produce the greatest likelihood of satisfaction, as citizens who win at both levels will have representation that is congruent with their partisan preferences in both cases. This parsing of the likelihood of satisfaction based on representation at different levels is a novel approach, in that it compares and contrasts the consequences of national elections at the district level with those outcomes at the national level. One can win a battle, but lose the war, i.e. win a great deal of representation at the district level, but still have one's party outnumbered in the legislature as a consequence of the national elections as a whole.

In order to gain leverage over these questions, I test my theoretical arguments through the use of repeated cross-sectional survey data from the Comparative Study of Electoral Systems (CSES) Modules 1-4 which surveys citizens in countries all over the world, as well as an array of country- and district-level institutional and electoral data. I find that electoral losers are more likely to be satisfied with democracy when losers are relatively more advantaged from party vote/seat discrepancy (meaning their party of choice received a more favorable proportion of seats to votes). However, if the vote/seat discrepancy disadvantages losers (meaning the party of their choice received a less favorable proportion of seats to votes), their likelihood of satisfaction is lower. I also find that winning and losing at different levels of representation matters for a citizen's satisfaction with democracy, as those who lack representation at both the district and the national level are less likely to be satisfied than those citizens who have representation at one level or more. Lastly, I find that there is no

clear pattern of satisfaction in the Central and Eastern European countries over time, nor is there a pattern of satisfaction for even some of the most longstanding democracies.

This work provides evidence which indicates the presence of a satisfaction differential based on the inequitable reality of electoral rules. Such a differential may contribute to the erosion of democratic system legitimacy and stability through the tendency of dissatisfied individuals toward radical political activism. In the following section of the paper, I discuss in greater detail the theory that undergirds the hypothesized relationship between citizens' status as a winner or loser, their benefit (or detriment) at the hands of disproportionality, and their satisfaction with the way democracy operates in their country. I also discuss the theoretical underpinnings of the hypothesized relationships between winning and losing at different levels of representation and satisfaction, as well as those of the relationship between the temporal component and winning and losing in consensus and majoritarian systems. Next, I describe the cross-sectional CSES data upon which I draw in order to conduct my analyses, including the coding of all variables incorporated in my various statistical models. From there, I discuss my methodology and the robustness checks which were undertaken to help provide a greater degree of confidence in the results of my analyses. Lastly, I will offer concluding remarks regarding my results and their implications for our understanding of the determinants of satisfaction with democracy, as well as offer avenues for future research.

## 2 Theoretical Development

A wealth of scholarly work has studied the way in which electoral outcomes contribute to certain attitudes toward democracy as held by the citizenry. However, the concept of public support for, or satisfaction with, democracy is somewhat ambiguous. In order to study this phenomenon, a distinction must be made between the different elements of which it is comprised. In his seminal work, A Systems Analysis of Political Life, Easton (1965) distinguishes between support for a specific set of elected leaders that happen to occupy political office at a given time (specific support) and support for the political system, i.e. the democratic system (diffuse support). These types of support are related and underlie the concept of political support, with the former being based on evaluations that reflect judgments about the current political landscape and the later being based on affective orientations that represent deep-seat adherence to a set of values (Dalton, 1999).<sup>6</sup> More recent literature has expanded upon the distinction made in this foundational work (Muller and Jukam, 1977; Dalton, 1999; Norris, 1999; Schedler and Sarsfield, 2007; Kotzian, 2011). An additional differentiation to be made is that of support for democratic principles (Weil, 1989; Linde and Ekman, 2003). Therefore, in studying public support for democracy, one must take care to specify the type of support to be studied, whether it be support for the current government, support for the democratic system, or support for the very principles of democracy themselves. While all of these elements have important roles to play in what they can tell scholars, this manuscript is primarily concerned with how specific support —voting for the current government— interacts with institutional structures to formulate diffuse support — citizens' level of support for the democratic system in their country.

<sup>&</sup>lt;sup>5</sup>For but a few examples, see Ginsberg and Weissberg (1978); Fuchs, Guidorossi and Svensson (1995); Anderson and Guillory (1997); Norris (1999); Anderson and Tverdova (2001); Bowler and Donovan (2002) and Anderson et al. (2005).

<sup>&</sup>lt;sup>6</sup>This relationship is evidence in the work of scholars such as Citrin and Green (1986); Gabriel (1989); Nadeau and Blais (1993); Anderson and Guillory (1997); Bowler and Donovan (2002); Anderson et al. (2005); Singh, Lago and Blais (2011); and Singh (2014).

In order to have a functioning democracy, a state, at minimum, must have free, fair, and competitive elections in which citizens are allowed to cast their vote for one of at least two political rivals (Dahl, 1956; Norris, 2014). Blais and coauthors (2015, p.1) note that typically, when people cast a vote in an election, they are casting that vote for a party, "which receives few or many votes and seats, and which does or does not enter government." However, according to Anderson and Guillory (1997, p. 68), "the same set of democratic institutions can have different consequences for different groups among those governed by them, and in particular for those in the political minority and majority." It is within this context that I examine satisfaction with democracy.

Speaking more broadly, previous scholarship has indicated that elections are associated with an increase in satisfaction with democracy among the members of the citizenry (Ginsberg and Weissberg, 1978; Blais and Gélineau, 2007; Adam, 2014). Parties are the vehicle through which voters gain their elected representation. Voting in elections — a form of specific support —directly or indirectly determines the winning and the losing parties/candidates while also creating ambivalence toward winners on the part of the losers (Kaase and Newton, 1995; Nadeau and Blais, 1993). Winners are those citizens who voted for the governing party (or a party that is a member of the governing coalition). The literature also suggests that casting a vote for the party that wins government is associated with a more pronounced increase in satisfaction (Citrin and Green, 1986; Gabriel, 1989; Nadeau and Blais, 1993; Anderson and Guillory, 1997; Bowler and Donovan, 2002; Anderson et al., 2005; Singh, Lago and Blais, 2011; Singh, 2014). Indeed, being an electoral winner in even a single instance will increase satisfaction with democracy (Curini, Jou and Memoli, 2012).8 These voters are inclined towards satisfaction with democracy as they likely perceive the

<sup>&</sup>lt;sup>7</sup>These authors also note that in candidate-centered elections, such as those in SMD systems, open list systems, and mixed member systems, people may cast a personal vote for an individual candidate (Blais et al., 2003; Marsh, 2007). However, an overwhelming majority of citizens cast their vote based on partisan association.

<sup>&</sup>lt;sup>8</sup>It should be noted that Curini, Jou and Memoli (2012) found satisfaction with democracy only continues to increase due to repeated winning after the initial win if the winner is in close ideological proximity to the government.

government to be sensitive to their desires (Citrin and Green, 1986; Kuechler, 1986; Lambert et al., 1986; Gabriel, 1989; Nadeau and Blais, 1993; Kornberg and Clarke, 1994). Losers are those who voted for a minority party (or a party that is not a member of the governing coalition). Thus, they are inclined towards dissatisfaction with democracy as they, in turn, likely perceive the government to be dismissive of their desires.

And, indeed, it is reasonable for both of these groups of voters to perceive things in the way that they do, as evidenced by the literature. In keeping with Pitkin's (1967) delegate model that I have just alluded to, there is a wide literature that suggests that not only are elites responsive to public preferences, but more specifically, they are responsive to the majority. Anderson and Guillory's (1997) findings suggest losers are more satisfied in consensual systems because they are more likely to have their preferred policies achieved than losers in majoritarian systems. Thus, parties are a vehicle to arrive at elected representation which will then be particularly sensitive to the desires of the winners.

In order to further our understanding of the way in which winning (or losing) relates to satisfaction with democracy, some scholars have demonstrated changes in satisfaction among winning and losing voters by utilizing panel studies which record satisfaction levels both before and after the election (Anderson et al., 2005; Blais and Gélineau, 2007; Blais, Morin-Chassé and Singh, 2015). Such work allows for the identification of the change in satisfaction as it relates to an election. There is also a growing literature that examines the way in which characteristics and performance by the party one has chosen to support can influence satisfaction. Indeed, there is evidence that winning creates enhanced satisfaction among those who are ideologically proximate to the government that forms after the election (Curini, Jou and Memoli, 2012). Singh and coauthors (2012) have also found evidence that voting for the party that wins government is associated with a greater degree of satisfaction

<sup>&</sup>lt;sup>9</sup>See the following for related discussion: Downs (1957); Weissberg (1978); Page and Shapiro (1983); Ferejohn (1986); Page and Shapiro (1992); Stimson, Mackuen and Erikson (1995); Wlezien (1995); Geer (1996); Wlezien (1996); Cohen (1997); Hobolt and Klemmensen (2008).

 $<sup>^{10}</sup>$ Additionally, see Anderson and LoTempio (2002) for a panel study dealing with political trust predicated on being an electoral winner.

than is found among those who voted for a party that just enters the legislature. <sup>11</sup> These arguments lead me to the following hypothesis. <sup>12</sup>

 $H_1$ : Voters that win at the national level should have a higher level of satisfaction with democracy while voters that lose should have a lower level of satisfaction.

Lijphart's index of majoritanianism/consensualism, as utilized by Anderson and Guillory (1997) to demonstrate the relationship between consensus democracy and satisfaction, has a number of dimensions which are based upon the structure and powers of each branch of government in the democracy, as well as the structure and makeup of the electoral system. The dimension I am primarily concerned with here is that of (dis)proportionality. Liphart (1984, p. 161) himself notes that "except under the most unusual circumstances, it is impossible for any electoral system to yield exactly proportional results." Disproportionality is a dimension which has a specific quality of theoretical interest which the other dimensions offered by Lijphart lack. I would argue that disproportionality has more bearing on satisfaction with democracy than the other dimensions due to its proximity to the voter. Indeed, the mathematical approach to distributing a share of seats based on the vote shares allotted to parties by the voters is more directly connected to those voters in theoretical terms than whether for instance the legislature is unicameral or the constitution allows for judicial review. This is not to say that the other dimensions have no bearing on voters' satisfaction with the way democracy works, but rather that I find disproportionality the most theoretically compelling dimension as it actually translates the will of the people into their elected representation.

<sup>&</sup>lt;sup>11</sup>Additionally, some scholarly work has indicated that a tight margin of electoral victory leads to a heightened level of satisfaction among winning voters (Howell and Justwan, 2013). There is also evidence that satisfaction is enhanced when a voter is strongly linked on a psychological level with the winning party (Singh, 2014).

<sup>&</sup>lt;sup>12</sup>While support for similar hypotheses has already been found by previous scholarship, this hypothesis is key to the theoretical developments I offer in this paper as it underlies the logic for the novel hypotheses I offer. Additionally, I argue that it is helpful to reexamine this relationship in the broader contexts that are associated with a newer dataset with greater cross-national coverage than the datasets previously utilized in testing this and related hypotheses.

I argue that in both majoritarian and consensual systems, not all winners in a given country are created equal, nor are all losers. My theoretical expectation is that satisfaction with democracy among voters will be moderated by the voters' status as losers (or winners) and the discrepancy in representation they experience due to the level of disproportionality in the translation of their chosen party's vote-share into its seat-share. More specifically, if a losing voter casts a vote for a party that is more advantaged by vote/seat share discrepancy, I posit that her likelihood of satisfaction will be greater than that of a losing voter that was less advantaged by vote/seat share discrepancy. This is due to the fact that the losing voter whose party is more advantaged receives a greater degree of representation than her losing counterpart whose party is less advantaged. Additionally, both those losers that are more advantaged and those that are less advantaged will have a lower likelihood of satisfaction when compared to winning voters. I also posit that winning voters who are more advantaged by vote/seat share discrepancy will have a higher likelihood of satisfaction than those winners who were less advantaged by it. This argument rests on an assumption that voters are able to receive information about electoral outcomes from sources such as the media and discern the relative fairness of that election from that information. Voters capable of basic arithmetic can assess whether they were "cheated" out of seats by the rules of the game, or whether they "made out like bandits" by taking more of their fair share.

Furthermore, the argument assumes that voters are sensitive to any discrepancy in the translation of votes into seats. The intuitions here are drawn from the study of distributive and procedural fairness in a variety of fields, such as politics, economics, sociology, and psychology. Extant work on distributive and procedural fairness supports the notion that people tend to have a sensitivity to procedural fairness, along moral and strategic dimensions (Rasinski and Tyler, 1988; Anand, 2001; Cremer and Blader, 2006). Furthermore, the procedural justice literature suggests that perceived fairness in procedure is associated with

greater satisfaction in outcomes (den Bos, Wilke and Lind, 1998).<sup>13</sup> Given the propensity of people to be attuned to distributive and procedural fairness, I argue that voters will be sensitive to rules of the game and the translation of votes into seats. My hypotheses regarding the mediating effect of vote/seat disproportionality and winner/loser status on satisfaction can be found below along with Table 1 which indicates my theoretical expectations.

 $H_2$ : Voters that lose at the national level and are more advantaged by vote/seat share discrepancy should display a higher level of satisfaction with democracy than those losing voters that are less advantaged by such discrepancy.

 $H_3$ : Voters that win at the national level and are more advantaged by vote/seat share discrepancy should display a higher level of satisfaction with democracy than those winning voters that are less advantaged by such discrepancy.

**Table 1.** *H1*, *H2*, *H3*: Hypothesized Likelihood of Satisfaction with Democracy based on Vote/Seat Discrepancy

	Harmful Discrepancy	Beneficial Discrepancy
Loser	Lowest Likelihood of Satisfaction	Low Likelihood of Satisfaction
Winner	High Likelihood of Satisfaction	Highest Likelihood of Satisfaction

Heretofore unexamined, there lies the relationship — or lack thereof — between what it means to win and lose at different levels of representation. While the literature cited above strongly suggests that being a winner via congruent partisan control of the national government or via congruent partisan participation in the governing coalition increases one's likelihood of being satisfied, scholars currently have very little insight into how district-level dynamics in representation that might have interplay with those national-level dynamics. We know that being an electoral winner in even a single instance will increase satisfaction with democracy (Curini, Jou and Memoli, 2012), but what about the effect on satisfaction

<sup>&</sup>lt;sup>13</sup>While satisfaction with outcomes seems more directly related to specific support — as an electoral outcome — it is still suggestive of an overall sense of attention to fairness in rules and procedures, which I argue, in turn, can interact with specific support to formulate diffuse support.

when an individual votes for a party that carries their district or gets a majority or plurality of the representation to be had there while their party fails to control government either alone or in coalition with other parties? This under-explored electoral outcome based on winning and losing across levels of representation may have substantial explanatory power over satisfaction with democracy.

While not directly comparable, Anderson and LoTempio (2002) hypothesize that "voters who vote for winners more often should exhibit higher levels of trust than those who vote for winners less often. Conversely, voters who vote for losers more often should display lower levels of trust than those who vote for losers less often" (338). These authors make the case that these two patterns, when taken together, indicate that citizens should have "more positive attitudes about the political system if they voted for the winners than if they voted for the losers. However, when those who voted for the losers in one electoral arena also voted for the winners in another, they should [have more positive attitudes] than when they voted only for losers. Similarly, when citizens vote for the winners in more than one electoral contest, they should [have more positive attitudes] than when they voted for the winners in only one" (338). Given the close association of ideas like that of trust in government, efficacy, and satisfaction with democracy in the literature, I draw on Anderson and LoTempio's work here to develop my own intuitions about winning across levels of representation. My hypothesis about the differential effect of winning and losing across levels of representation, as well as Table 2 detailing my theoretical expectations, appear below.

 $H_4$ : Voters that win at both the national level and the district level should have a higher level of satisfaction with democracy than those voters that only won at one level or the other, while those that lost across both levels should have the lowest level of satisfaction.

 $\textbf{Table 2.} \ \textit{H4:} \ \textit{Hypothesized Satisfaction with Democracy based on Winning and Losing at Different Levels of Representation } \\$ 

	National Loser	National Winner
District Loser	Lowest Level of Satisfaction	Intermediate Level of Satisfaction
District Winner	Intermediate Level of Satisfaction	Highest Level of Satisfaction

In the next section of the paper, I discuss the data I employ, as well as my measurement and coding strategy for empirically analyzing the above stated hypotheses.

#### 3 Data and Measurement

The theoretical arguments I make herein pertain to individual-level analysis. I utilize data from the CSES Modules 1-4 which contain post-election polling data that correspond with elections from 1996 through 2013 as well as Gallagher's index of electoral system disproportionality (Gallagher, 2015). The individual-level surveys from the aforementioned CSES modules will provide data about individuals' satisfaction with democracy in their nation. It also provides system level data about national level party vote shares for lower house elections as well as the resulting allocation of seats. Additionally, It provides district level vote share data. Data regarding control of governments is drawn from the Parliaments and Governments Database (Döring and Manow, 2015), as well as the Political Data Yearbook (ECPR, 2016).

My case selection for this analysis is based on the following criteria: given my theory makes inferences about the level of satisfaction found among voters who either did or did not vote for a party that came to control government I look only at parliamentary systems and semi-presidential systems — specifically in years where there is no government cohabitation. This is due to the possibility of divided government that is present in presidential and semi-presidential systems where cohabitation occurs, which can lead to a break down in terms of what it means to be a winner or a loser. Thus, the scope of the research is confined to the 74 country-election year cases with the necessary data in the CSES Modules 1-4.<sup>14</sup>

<sup>&</sup>lt;sup>14</sup>These modules and all pertinent documents for the purpose of analysis can be found at this web address: http://www.cses.org. The country-year cases included in the analysis for this study are as follows: Albania (2005), Australia (1996, 2004, 2007, 2011), Austria (2008), Belgium (1999, 2003), Canada (1997, 2004, 2008), Croatia (2007), Czech Republic (1996, 2002, 2006, 2010), Denmark (1998, 2007), Estonia (2011), Finland (2003, 2011), France (2007), Germany (1998, 2002, 2005, 2009, 2013), Greece (2009, 2012), Hungary (1998, 2002) Iceland (1999, 2003, 2007, 2009), Ireland (2002, 2007), Israel (1996, 2003, 2006), Italy (2006), Japan (1996), Latvia (2010), Montenegro (2012), Netherlands (1998, 2002, 2006, 2010), New Zealand (1996, 2002, 2008, 2011), Norway (1997, 2001, 2005, 2009), Poland (2005, 2011), Romania (1996, 2004), Serbia (2012), Slovakia (2010), Slovenia (1996, 2008), South Africa (2009), Spain (1996, 2000, 2004, 2008), Sweden (1998, 2002, 2006) and the United Kingdom (1997, 2005). This list is exhaustive, as it includes every country-year for which the relevant survey data related to a parliamentary election was available, given the criteria outlined in the main text.

#### 3.1 Outcome Variable

My dependent variable across all my analyses — satisfaction with democracy, or satisfaction — is measured based on the individual survey responses to the question about level of satisfaction with democracy in the four modules of the CSES from 1996-2013. Much scholarly analysis has employed a measure of how satisfied people are with the way democracy works in their country based on responses to survey questions (e.g. Weil, 1989; Kuechler, 1991; Clarke and Kornberg, 1992; Anderson and Guillory, 1997; Fuchs, 1999; Karp, Banducci and Bowler, 2003; Blais and Gélineau, 2007; Howell and Justwan, 2013). Indeed, these questions are intended to measure respondents' assessments of how democracy actually functions, as opposed to their attitudes toward a particular individual or party in the current government (Lockerbie, 1993). However, this measure is imperfect and has been found to correlate with other measures of support (e.g. partisan preference or executive approval). <sup>16</sup> On the other hand, such imperfection does not discredit its use. Anderson (2002, p. 10) argues that the measure is a "reasonable (albeit imperfect indicator that we can use to test our theories." He also makes the case that the findings of Canache, Mondak and Seligson (2001) give evidence to the notion that this indicator actually does measure some dimension of the desired concept, so long as one begins with the assumption that satisfaction with democracy actually measures something.<sup>17</sup> Based on the theoretical questions raised in this paper, this indicator

<sup>&</sup>lt;sup>15</sup>As discussed above, numerous studies have used satisfaction with democracy as an outcome variable (Harmel and Robertson, 1986; Kuechler, 1986, 1991; Clarke, Dutt and Kornberg, 1993; Lockerbie, 1993; Kornberg and Clarke, 1994; Fuchs, Guidorossi and Svensson, 1995; Anderson and Guillory, 1997; Anderson and Tverdova, 2001; Farrell and McAllister, 2006; Blais and Gélineau, 2007; Curini, Jou and Memoli, 2012; Campbell, 2013: Howell and Justwan, 2013).

<sup>&</sup>lt;sup>16</sup>See Canache, Mondak and Seligson (2001); Klingemann (1999); Kornberg and Clarke (1994) for further discussion of the relationship between specific and diffuse support.

<sup>&</sup>lt;sup>17</sup>Canache, Mondak and Seligson (2001) are the only scholars thus far to produce results that could be argued to wholly invalidate satisfaction with democracy as a measure of the concept of support for the way democracy functions. However, as Blais and Gélineau (2007) note, based on the work of Anderson (2002), Canache and coauthor's conclusions are based on the analysis of data from newer democracies where one would expect the linkage between specific support and satisfaction with democracy to be stronger than the linkage between diffuse support and satisfaction with democracy.

appears to most closely approximate how citizens feel about the way the democratic system in their country actually operates (Anderson, 1998; Linde and Ekman, 2003).<sup>18</sup>

For my purposes, survey respondents are coded categorically as either not at all satisfied, not very satisfied, fairly satisfied, or very satisfied as opposed to the more commonly used dichotomous measure with respondents being either 'satisfied' or 'dissatisfied.' This approach largely breaks with the extant literature. Indeed, Howell and Justwan argue that "the base satisfaction threshold of satisfied or not is analytically more interesting than the internal variations between 'fairly' and 'very' satisfied or between 'not very' and 'not at all' satisfied" (2013, p. 339). I disagree, and offer as part of the novel contribution of this research the idea that nuances in satisfaction should be examined, just as nuances in institutional rules should be. The import of differences in levels of satisfaction becomes more readily apparent when one As has been discussed previously, this measure, while imperfect, appears to capture satisfaction about democratic functioning in the respondent's country, which is the concept at issue here. The aggregated distribution of this variable across countries is depicted in Figure 1 below. Note roughly twenty percent of Greek respondents are satisfied with the way democracy operates there in contrast with the more than ninety percent of Danish respondents who are satisfied with the way democracy operates in that country. On the whole, consensual systems such as Austria, Denmark, Finland, the Netherlands, Norway, Spain and Sweden have a vast majority of respondents in each that are more satisfied than less, while countries like Bulgaria, Croatia, Greece, Latvia, and Slovenia, have quite a bit less than a majority who identify as being satisfied. This research helps to clarify the determinants of the intensity of satisfaction, rather than just whether citizens are satisfied or not.

<sup>&</sup>lt;sup>18</sup>Further discussion on improving measures of diffuse support can be found in the concluding section of this paper.

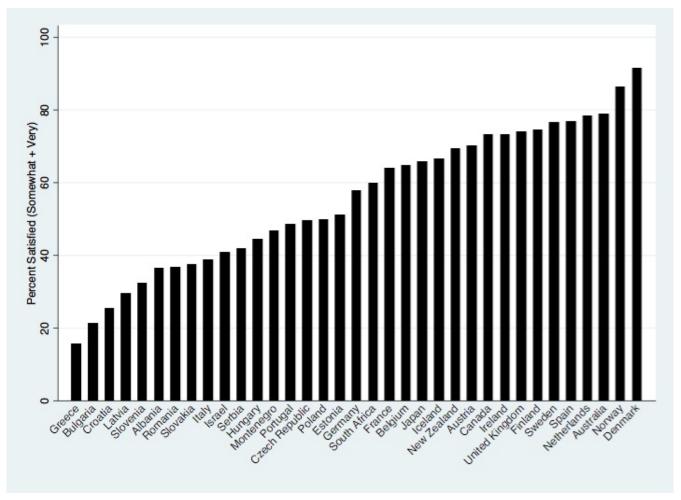


Figure 1. Satisfaction with Democracy, by country

# 3.2 Explanatory Variables

Below I discuss the explanatory variables for the three sets of analyses I conduct based upon the sets of hypotheses outlined above.

#### Winning, Losing, and Vote/Seat Discrepancy: H1, H2, H3

My main independent variable — national electoral winner/loser status, or *loser* — is coded as a dichotomous variable. The CSES data sets contain questions that ask how the respondent voted in the most recent elections. It also contains data on which parties controlled government after the election. The respondent will be coded 1, as an electoral loser, if his or

her survey response indicates that his or her votes does not coincide with a party that gained an executive ministerial post (which indicates that a party is not part of the government). The respondent will be coded 0, as an electoral winner, if his or her survey response indicates that his or her vote coincides with a party that received at least one executive ministerial post after the election as this is indicative of an electoral win (based on the party having a presence in the government) at national level. This operationalization of winner/loser status based on presence in government is in keeping with the literature.<sup>19</sup>

My next main independent variable — party vote/seat discrepancy, or discrepancy — will be coded as a continuous interval-level variable measuring the disproportionality between lower house vote and seat shares. This measure is attained by subtracting the vote share of the party for which the respondent cast his or her vote by the seat share they are allocated after the election.<sup>20</sup> Based on my data, the scale ranges from -12.78 to 20.38. Negative values indicate that a party was negatively impacted by disproportionality, gaining a smaller share of seats than their share of votes. Positive values indicate that a party was positively impacted by disproportionality, receiving a greater share of seats than their vote share. A value of zero means that the party was allocated a percentage of seats equal to the percentage of the vote that party received. I expect a positive relationship between disproportionality and satisfaction among both winning and losing voters. The following equation is used to derive vote/seat discrepancy:

$$D_i = S_i - V_i \tag{1}$$

where D is the discrepancy, S is seat share, V is vote share, and i is a given party.

 $<sup>^{19}</sup>$ See Anderson and Guillory (1997) and Blais and Gélineau (2007) as examples of this kind of approach.

<sup>&</sup>lt;sup>20</sup>Blais, Morin-Chassé and Singh (2015) use a different measure of vote-seat disproportionality while studying satisfaction with democracy which they refer to as the deficits in representation. However, their approach has issues with collinearity that this measurement does not. It also does not directly capture the benefit or detriment of disproportionality to the voter.

To put a finer point on my discussion of this variable, I will employ the following empirical example. Norway is considered to be a moderately consensual political system (Lijphart, 1984, 1999). Table 3 below depicts the vote shares and seat shares of each party that contested Norway's 2005 legislative election. It also denotes the discrepancy between each party's seat share and its vote share, as well as which parties went on to form the government. In this particular election voters who cast their votes for AP, FRP, and SP were winning voters, as those are the parties that formed government. However, each of these parties was affected differently by vote/seat discrepancy.

Based on this difference, I argue that voters who voted for a winning party such as the AP which received a +3.40% benefit from vote/seat discrepancy will have a higher likelihood of being satisfied with democracy than say a voter who voted for another winning party, such as the SV, which received only a +0.05% benefit. Additionally, I would expect voters who voted for both of these winning parties to have a greater likelihood of satisfaction than voters who voted for a hypothetical winning party that was disadvantaged by vote/seat discrepancy (meaning it has a negative value for discrepancy). The percentage of party members in these parties who are satisfied appears consistent with these expectations. I also argue that voters who voted for a losing party such as the Venstre which received a +0.68% benefit from vote/seat discrepancy will have a higher likelihood of being satisfied with democracy than say a voter who voted for another losing party, such as the RV, which received a -1.23% vote/seat share discrepancy disadvantage. Not all winners are the same, nor are all losers. This leads me to the discussion of my next variable.

Table 3. Norwegian Legislative Election Results for 2005

Party	Vote Percentage	Seat Percentage	Discrepancy	In Govt?	Discrepancy In Govt? Percent Satisfied
Det Norske Arbeiderparti (AP)	32.69	36.09	+3.40	Yes	94.36
Fremskrittspartiet (FRP)	22.06	22.49	+0.43	$N_{\rm O}$	77.35
Høyre (H)	14.10	13.61	-0.49	No	90.37
Sosialistisk Venstreparti (SV)	8.83	8.88	+0.05	Yes	92.49
Kristelig Folkeparti (KRF)	6.78	6.51	-0.27	$ m N_{o}$	88.76
Senterpartiet (SP)	6.48	6.51	+0.03	Yes	93.02
Venstre (V)	5.24	5.92	+0.68	$ m N_{o}$	88.78
Rød Valgallianse (RV)	1.23	0.00	-1.23	No	78.95

I utilize an independent variable which is an interaction term, which consists of loser and discrepancy. This interaction term measures the way in which vote/seat discrepancy moderates the likelihood of satisfaction among electoral losers. This is because beneficial vote/seat discrepancy can offset the negative consequences of being an electoral loser on an individual's propensity to be satisfied with their country's democratic system. My expectations are that winners and losers are more likely to be satisfied when they benefit from vote/seat discrepancy as this would mean they have a greater degree of representation and control than what is reflected in their vote share. More specifically, I expect losers benefiting from vote/seat discrepancy to have a higher likelihood of satisfaction than losers who benefited less or were disadvantaged by such a discrepancy. Additionally, winners who benefit should have a higher likelihood of satisfaction than those winners who benefited less or were disadvantaged.

#### Winning and Losing at Different Levels of Representation: H4

My next key independent variable for this analysis — district electoral winner/loser status, or district loser — is coded as a dichotomous variable. The CSES data sets contain questions that ask how the respondent voted in the most recent elections. It also contains data on each competing party's district-level vote share. The respondent will be coded 1, as a district electoral loser, if his or her survey response indicates that his or her vote does not coincide with a party that gained a majority or plurality of votes in that district (which indicates that their party did not carry the district). The respondent will be coded 0, as a district electoral winner, if his or her survey response indicates that his or her vote coincides with a party that received a majority or plurality of votes as this is indicative of an electoral win (based on the party having carried the district) at district level. While this is certainly not a perfect measure, I am limited to the available data in order to operationalize this concept.

I also utilize a third key independent variable for testing H4 — joint winner/loser status, or *joint loser* — which is coded as a categorical variable. This variable categorizes each

individual as (a) having lost at both levels of government, (b) having won at the district level but lost at the national, (c) having lost in their district but won at the national, or (d) having won at both levels of representation. Respondents were coded to these categories by examining their values for each *national loser* and *district loser*.<sup>21</sup>

In addition to these, I employ a logged control variable for district magnitude — Logged DM — which is coded as an interval level variable ranging from 0 to 6.91. This variable is based on the raw district magnitude for the district in which each respondent resides and is logged to account for the diminishing returns of adding additional district seats at higher magnitudes. Given the theory undergirding this particular analysis is one which pertains to district-level political outcomes, controlling for logged magnitude seems appropriate, as it will help account for the effect of the variance in magnitude on satisfaction.  $^{22}$ 

#### Controls for All Models

I employ a control for age of democracy drawn from the Polity IV dataset (Marshall, Jaggers and Gurr, 2014). This variable is coded as a continuous measure based on the number of years the regime has existed. I include this variable given the extant literature's acknowledgement of the role experience with democracy plays with regard to determining satisfaction (Evans and Whitefield, 1995). Based on this literature, my expectations are that as the number of years for which a country has been a democracy increases, so too will the likelihood that citizens in that democracy will identify as being satisfied.<sup>23</sup>

In testing these hypotheses, I also plan to account for the demographic characteristics of voters in order to discern any patterns of satisfaction across sociodemographic attributes.

<sup>&</sup>lt;sup>21</sup>As is shown below, this measure is useful in terms of graphically depicting the hypothesized relationship.

 $<sup>^{22}</sup>$ I will also make use of the variables Gallagher and discrepancy in certain models for this analysis. These models can be found in the appendix.

<sup>&</sup>lt;sup>23</sup>I do not interact this variable with losing status and discrepancy, as some might expect. I argue that even in newer democracies, voters are capable of seeing election results and coming to conclusions, just based upon the mathematics, about how the discrepancy between vote shares and seat shares can either hurt or benefit them.

I will control for these sociodemographic characteristics based on the answers of survey respondents found in modules 1-4 of the CSES dataset. The sociodemographic variables I include are *Female* (coded 1 if the respondent is female, 0 if male), *Age* (coded numerically based on the respondent's actual age), *Education* (coded from 1 to 5 with 1 being a very low level of education, such as no formal education or only early childhood or incomplete primary, and 5 being a very high level of education, such as a university degree or more), and *Employment status* (1 if employed, 0 if otherwise). Significant findings in this regard may be indicative of which socioeconomic cleavages are being prioritized by elites in these democratic regimes.<sup>24</sup>

I do not control for sociotropic and egocentric economic performance evaluations like Anderson and Guillory (1997), among others, have done in their research. The primary reason for this is that the CSES questionnaire does not include any questions about how the respondent perceives the economy or her own financial future. Additionally, I do not control for household income due to the paucity of individual-level data in the available survey modules. However, I do employ a control for logged gross domestic product per capita, to account for economic performance and its potential to drive respondents' evaluations of democratic performance. Data for this variable is drawn from the World Bank's World Development Indicators dataset for all country-years in my analysis. Descriptive statistics for all of the variables utilized in my analysis can be found in the appendix in Table A3, while Tables A4, A5, A6 in the appendix provide greater detail regarding all variable codings.

<sup>&</sup>lt;sup>24</sup>See Chhibber and Torcal (1997) and Zielinski (2002).

## 4 Analysis

# 4.1 Analysis of Satisfaction Predicated on Winning, Losing, and Vote/Seat Discrepancy: *H1*, *H2*, *H3*

In the literature developed to this point, scholars have yet to delve into how discrepancies between vote and seat shares can affect satisfaction with democracy. In beginning to address this gap, I have arrived at evidence which supports the notion that discrepancies between a party's vote and seat shares do impact the likelihood that voters who support that party will be satisfied with the way democracy works. Due to the hierarchical structure of my data, which has individuals nested in countries, I estimate a multilevel ordinal logit model which allows inclusion of micro- and macro-level control variables as well as cross-level interactions in an effort to demonstrate the robustness of my findings.<sup>25</sup>

The first step to this analysis is to make the determination as to whether patterns of individual satisfaction with democracy established by the extant literature are evidenced by these data. Hypothesis 1 asserts voters that win at the national level should have a higher likelihood of satisfaction with democracy than those voters that lose. I find support for this hypothesis, with losers having 0.11 decreased probability of satisfaction compared with winners, holding all else at means.<sup>26</sup> Having established support for the notion that national level electoral winners have a greater likelihood of satisfaction with democracy than losers, I must next account for my variable of interest in H2 and H3: level of discrepancy. Table 4 below presents a multilevel ordinal logistic regression examining the likelihood of satisfaction with democracy among winners and losers predicated on levels of vote share/seat share discrepancy that these individuals — and their preferred parties —experience. In order to more easily examine the substantive impact of vote/seat share discrepancy on the likelihood

<sup>&</sup>lt;sup>25</sup>See Steenbergen and Jones (2002).

<sup>&</sup>lt;sup>26</sup>This relationship is negative and statistically significant at the  $\alpha = 0.001$  level. Logit coefficients and changes in predicted probability are reported in Tables A1 and ?? in the appendix, as this hypothesis testing is not directly related to the novel theoretical and empirical contribution of this manuscript.

of satisfaction, I plot the change in predicted probability among winners and losers across a range of discrepancy values. The changes in predicted probability for both winners and losers are plotted in Figure 2 below.

My second hypothesis posits voters that lose at the national level while being more advantaged by vote/seat share discrepancy should have a higher level of satisfaction with democracy than those losing voters that are less advantaged by such discrepancy. My third hypothesis posits voters that win at the national level while being more advantaged by vote/seat share discrepancy should have a higher likelihood of satisfaction with democracy than those winning voters that are less advantaged by such discrepancy. Across all four outcome categories in Figure 2, I find that the not only are winners and losers indistinguishable from one another, but their lines are largely flat, indicating that the likelihood respondents identify as being satisfied at that given level is not affected by changes in vote/seat discrepancy. Thus, while my interaction coefficient is significant, I find little evidence of meaningful substantive interactive effect. This suggests voters are not sensitive to changes in vote/seat share discrepancy as I have hypothesized.

The average marginal effect of being a loser is shown in Figure 3 below. This figure suggests that becoming a loser in associated with a party that is most negatively impacted (disadvantaged) by discrepancy is associated with a nearly a -0.05 change in a citizen's probability of being very satisfied, where as were that loser associated with a party that is most positively impacted (advantaged) by discrepancy, they would have no discernible change in their probability of satisfaction. There is a similar effect on the probability a citizen will be Fairly Satisfied. Becoming the most disadvantaged loser is also associated with a 0.05 increase in the likelihood the citizen will identify as not very satisfied. It is also associated with a 0.1 increase in the probability of being Not At All Satisfied. In both instances, as discrepancy approaches the upper observed value, the average marginal effect becomes indistinguishable from zero. This figure lends some support to the idea that vote/seat discrepancy does indeed shape losers' satisfaction.

Table 4. Multilevel Ordinal Logit Regression Coefficients - Satisfaction with Democracy: H1, H2, H3

Independent Variable	Model 1 Coeff.	S.E.
Fixed effects		
Loser	-0.495***	(0.018)
Discrepancy	0.005	(0.003)
$Loser \times Discrepancy$	0.024***	(0.005)
Logged GDP Per Capita	-0.711***	(0.063)
Regime Age	-0.008***	(0.002)
Female	-0.109***	(0.014)
Age	-0.001**	(0.001)
Education	0.064***	(0.006)
Employed	0.053***	(0.016)
Cut 1	-10.142***	(0.656)
Cut 2	-8.106***	(0.656)
Cut 3	-5.018***	(0.656)
Random Terms		
Intercept Variance	1.974	(0.506)
$\chi^2$	1774.61	
Log Likelihood	-86102.392	
N individuals	83864	
N countries	33	

Note: Cell entries are logit coefficients with std. errors in parentheses. \*\*\* =  $p \le 0.001$ , \*\* =  $p \le 0.001$ , and \* =  $p \le 0.05$ , two-tailed test.

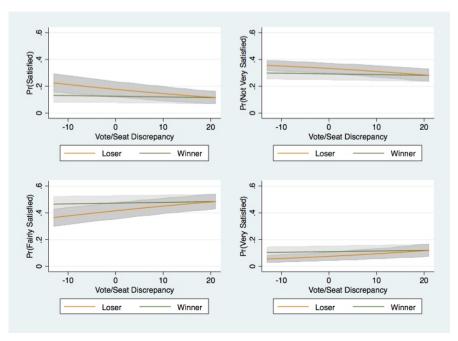


Figure 2. Changes in Predicted Probabilities of Satisfaction

Note: Shaded areas indicate 95% Confidence Intervals.

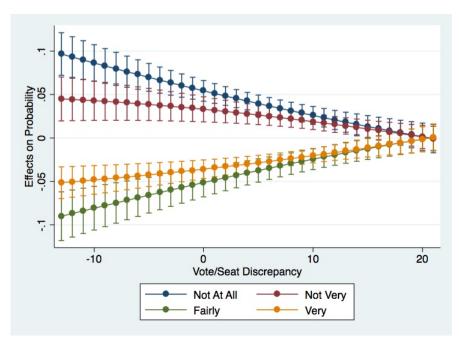


Figure 3. Average Marginal Effect of Losing on Satisfaction

Note: Whiskers indicate 95% Confidence Intervals.

#### 4.2 Winning and Losing at Different Levels of Representation: H4

The extant literature has mostly ignored district-level electoral outcomes thus far, meaning that we have no real basis for understanding how these outcomes can affect satisfaction with democracy. To fill this void, I have arrived at evidence which supports the notion that winning and losing at different levels of representation do impact the likelihood that voters will be satisfied with the way democracy works. Table 5 presents Model 3 below. This a multilevel ordinal logistic regression examining the likelihood of satisfaction with democracy among winners and losers at both national and district level.<sup>27</sup> In order to more easily interpret the substantive effect of the interaction of national winner/loser status and district winner/loser status on the likelihood of levels of satisfaction, I plot the change in predicted probability among winners and losers based on their national and district status. The changes in predicted probability for both winners and losers are plotted in Figure 4 below.

My fourth hypothesis posits voters that win at both the national level and the district level should have a higher level of satisfaction with democracy than those voters that only won at one level or the other, while those that lost across both levels should have the lowest level of satisfaction. In Figure 4, I find that across all combinations of winning and losing, voters are most likely to be Fairly Satisfied. They are also more likely to be Not Very Satisfied than they are Very or Not At All, which are indistinguishable from one another. More importantly for my hypothesis is that the effect of each winning and losing combination on each outcome is indistinguishable from the others. That is, the probability of indicating any given level of while one is both a national and district loser is indistinguishable from the probability of indicating that same level when one is both a national and district winner, as well as the combinations in between.<sup>28</sup>

<sup>&</sup>lt;sup>27</sup>I also estimate a model which interacts the Joint Loser variable with Vote/Seat Discrepancy. This model can be found in the appendix in Table A2.

<sup>&</sup>lt;sup>28</sup>The confidence interval for being a national loser and a district winner is 0.345 to 0.477, while it is 0.527 to 0.612 for being a national winner and a district loser. This indicates that the coefficients for these two

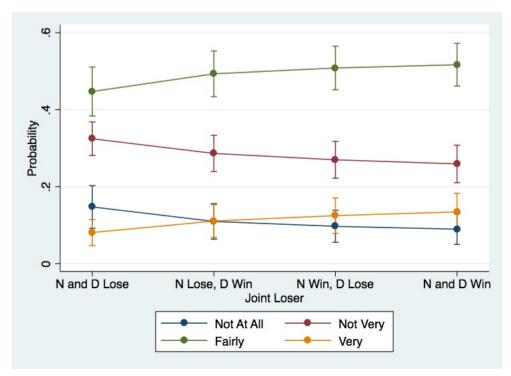


Figure 4. Predictive Margins of Satisfaction

Note: Whiskers indicate 95% Confidence Intervals.

categories are distinguishable from one another. The confidence interval for being a winner at both levels is indistinguishable with being a national winner and a district loser, as it ranges from 0.587 to 0.689. Losing at both levels is the excluded category.

Table 5. Multilevel Ordinal Logit Regression Coefficients - Satisfaction with Democracy: H4

	Model 2		Model 3	
Independent Variable	Coeff.	S.E.	Coeff.	S.E.
Fixed effects				
National Loser	-0.227***	(0.038)	_	_
District Loser	-0.069**	(0.026)	_	_
National Loser $\times$ District Loser	-0.343***	(0.042)	_	_
Joint Loser				
National Loser, District Winner	_	_	0.412***	(0.034)
National Winner, District Loser	_	_	0.570***	(0.022)
National Winner, District Winner	_	_	0.638***	(0.026)
Logged DM	-0.055	(0.034)	-0.055	(0.032)
Logged GDP Per Capita	-0.483***	(0.128)	-0.483***	(0.128)
Discrepancy	-0.001	(0.002)	-0.001	(0.002)
Regime Age	-0.007**	(0.002)	-0.007**	(0.002)
Female	-0.125***	(0.017)	-0.125***	(0.017)
Age	-0.002**	(0.001)	-0.002**	(0.001)
Education	0.082***	(0.008)	0.082***	(0.008)
Employed	0.051**	(0.019)	0.051**	(0.019)
Cut 1	-8.175***	(1.297)	-7.537	(1.297)
Cut 2	-6.141***	(1.297)	-5.502	(1.297)
Cut 3	-3.042***	(1.296)	-2.403	(1.297)
Random Terms				
Country Intercept Variance	1.293	(0.405)	1.293	(0.405)
District Intercept Variance	0.041	(0.010)	0.041	(0.009)
$\chi^2$	1349.25		1109.54	
Log Likelihood	-59498.301		-59498.301	
N individuals	58436		58436	
N districts	167		167	
N countries	27		27	

Note: Cell entries are logit coefficients with std. errors in parentheses. In Model 3, the excluded category for Joint Loser is National Loser, District Loser. \*\*\* =  $p \le 0.001$ , \*\* =  $p \le 0.01$ , and \* =  $p \le 0.05$ , two-tailed test.

#### 5 Conclusion

At the outset of this paper, I offered the following question for consideration: In what ways do a democracy's electoral institutions affect attitudes about the democratic process among the winning and losing voters of an election? How is this relationship conditioned by factors such as winning and losing at different levels of representation? There are many ways to approach these question, both in terms of the institutions one examines and in terms of what it means to be a winner or loser. In this paper, however, I have opted to examine the way in which rules regarding the translation of national-level vote share into seat share affect the satisfaction citizens have with the way democracy operates in their country. I also define winning as having voted for a party that forms government and losing as having voted for a party that did not.

My reasons for examining this institutional structure at this level, as it relates to satisfaction, are based on the fact that national-level vote shares are one of the key elements that determine which party (or parties) will control government. I am interested in the relationship between vote share and seat share, as it reflects the way in which the will of the mass public in a democracy is translated into actual representation. One might argue, and intuitively so, that winning voters will have a higher likelihood of being satisfied with the way democracy works in their country, while losers will have a lesser likelihood of satisfaction. Additionally, one might also intuitively argue that voters whose party does not receive a share of seats that is at least equal to the party's vote share might have a lesser likelihood of satisfaction with the way democracy operates as they have suffered from the discrepancy. Whereas, if a voter's party receives more seats than their vote share would dictate, they would show a greater likelihood of satisfaction, as they have benefited from the discrepancy.

I have also examined the way in which winning and losing at different levels of representation can affect satisfaction. This research takes the first stab at discerning what winning and losing look like across different levels of representation in that it begins to account for district-level electoral outcomes such as the relative vote share of a citizen's preferred political party. This work is useful in that it has the potential to help demonstrate that a diffusion of representation across levels can allow for increases in a citizen's likelihood of satisfaction with democracy via representation that is "closer" to them than the national level, which is more typically studied in the context of large-N cross-national scholarship.

While I have provided further support for the finding in the literature that winning voters will have a higher probability of satisfaction than losers (as evidenced by my results testing HI), my analyses also finds mixed support for my hypothesis that losers' level of satisfaction with democracy is higher when they have greater benefit from vote/seat discrepancy. This is a novel finding which allows us to have a deeper understanding of how specific electoral mechanics can influence citizens' satisfaction with the way democracy functions. However I find that winner's likelihood of satisfaction is largely unaffected by vote/seat discrepancy. That is to say its influence is not statistically distinguishable from zero. This is a less intuitive finding. However, it is possible that winning is what really matters to winners. Indeed, my finding suggest it might be less important to winning voters what their share of seats is relative to their share of votes. Rather, the important thing is that their party is in government. Further research should be conducted so as to parse out why winners are not influenced by vote/seat discrepancy.

I have also found mixed support for the notion that district-level representation matters for citizens (as evidenced by the results of my analyses which test H4. I find that winning at the national level distinguishes a citizen's likelihood of satisfaction from a citizen who did won only at the district level or not at all. However, those that won at both levels are indistinguishable from those that won at only the national. Further research should be conducted which can begin to account for how else winning at the district level might look different from winning at the national level as it pertains to satisfaction. Accounting for the actual proportion of district seats gained in determining winners and losers would be helpful and allow for more conceptually rigorous variable construction, and, thus, more valid testing.

Thus far, most cross-national work on the determinants of citizen satisfaction with democracy have largely focused on established democracies. Future scholarship should aim to discover when and how new democracies begin to look like long-established ones in terms of their citizens propensity or level of satisfaction. Questions of interest would be (1) at what temporal and structural point does the winner/loser satisfaction gap emerge in new democracies, (2) does a majoritarian/consensus gap in satisfaction emerge in new democracies as it has in old, (3) does the relative distribution of power across national and district levels moderate the effect of winning and losing at those different levels on satisfaction, and (4) is the satisfaction of citizens living in new democracies with an authoritarian legacy sensitive to electoral rules which translate the will of the people into their representation. The contributions herein lay some of the theoretical and empirical ground work for exploring these other important substantive questions. Gaining theoretical and empirical leverage over such questions will allow the scholarly community to further situate nascent and new democracies relative to their long-standing counterparts, possibly determining how democratization and democratic structures emerging in the modern day contrast with those that democratized their institutions decades, or even hundreds of years ago.

More pressing is the matter of measurement. Further consideration should be given to whether the survey items employed in this literature for measuring satisfaction with democracy as a system actually tap into peoples attitudes about the operations of democracy as a system, and not some performance evaluation of the sitting government. While it may make pooled comparisons across time difficult, scholars should look for ways to improve survey items geared toward measuring such attitudes, as it will allow for more accurate inferences. A possible way forward would be cross-national cognitive interviewing, which entails surveying a small number of respondents who are then encouraged to 'think aloud' while answering survey items. Beyond this, interviewers can prompt and probe the respondent so as to better understand what kind of considerations the respondent takes when answering questions regarding their satisfaction with the way democracy operates in their country. This might

help alleviate some concerns over translation problems, as well as inform scholars as to how the items themselves are internalized by respondents. Crafting a measure that offers greater validity will be a costly challenge, but it has the potential to enhance the ability of scholars to discern the effects of electoral institutions and outcomes on citizens' satisfaction.

## References

- Adam, Antonis. 2014. "Do Elections Bring Optimism?" Electoral Studies 33:137–143.
- Anand, Paul. 2001. "Procedural Fairness in Economic and Social Choice: Evidence from a Survey of Voters." *Journal of Economic Psychology* 22(2):247–270.
- Anderson, Christopher J. 1998. "Parties, Party Systems, and Satisfaction with Democratic Performance in the New Europe." *Political Studies* 46(3):572–588.
- Anderson, Christopher J. 2002. Good Questions, Dubious Inferences, and Bad Solutions: Some Further Thoughts on Satisfaction with Democracy. Working Paper No. 116 Binghamton University, Center on Democratic Performance Binghamton, NY: .
- Anderson, Christopher J., André Blais, Shaun Bowler, Todd Donovan and Ola Listhaug. 2005. Loser's Consent: Elections and Democratic Legitimacy. Oxford: Oxford University Press.
- Anderson, Christopher J. and Andrew J. LoTempio. 2002. "Winning, Losing, and Political Trust in America." *British Journal of Political Science* 32(2):335–351.
- Anderson, Christopher J. and Christine A. Guillory. 1997. "Political Institutions and Satisfaction with Democracy: A Cross-National Analysis of Consensus and Majoritarian Systems." *American Political Science Review* 91(1):66–81.
- Anderson, Christopher J. and Silvia M. Mendes. 2006. "Learning to Lose: Election Outcomes, Democratic Experience, and Political Protest Potential." *British Journal of Political Science* 36:91–111.
- Anderson, Christopher J. and Yuliya V. Tverdova. 2001. "Winners, Losers, and Attitudes About Government in Contemporary Democracies." *International Political Science Review* 22:321–338.
- Bernauer, Julian and Adrian Vatter. 2012. "Can't get no Satisfaction with the Westminster Model? Winners, Losers and the Effects of Consensual and Direct Democratic Institutions on Satisfaction with Democracy." European Journal of Political Research 51(4):435–468.
- Blais, André, Alexandre Morin-Chassé and Shane P. Singh. 2015. "Election Outcomes, Legislative Representation, and Satisfaction with Democracy." *Party Politics*.
- Blais, André, Elisabeth Gidengil, Agnieszka Dobrzynska, Neil Nevitte and Richard Adeau. 2003. "Does the Local Candidate Matter? Candidate Effects in the Canadian Election of 2000." Canadian Journal of Political Science 36(3):657–664.
- Blais, André and François Gélineau. 2007. "Winning, Losing and Satisfaction with Democracy." *Political Studies* 55:425–441.

- Blais, André and Marc André Bodet. 2006. "Does Proportional Representation Foster Closer Congruence Between Citizens and Policy Makers?" Comparative Political Studies 39(10):1243–1262.
- Bowler, Shaun and Todd Donovan. 2002. "Democracy, Institutions, and Attitudes about Citizen Influence on Government." *British Journal of Political Science* 32(2):371–90.
- Campbell, Ross. 2013. "Winners, Losers, and the Grand Coalition: Political Satisfaction in the Federal Republic of Germany." *International Political Science Review* 20:1–17.
- Canache, Damarys, Jeffrey J. Mondak and Mitchell A. Seligson. 2001. "Meaning and Measurement in Cross-National Research on Satisfaction with Democracy." *Public Opinion Quarterly* 65(4):506–528.
- Chhibber, Pradeep and Mariano Torcal. 1997. "Elite Strategy, Social Cleavages, and Party Systems in New Democracies: Spain." Comparative Political Studies 30(1):27–54.
- Citrin, Jack and Donald Green. 1986. "Presidential Leadership and the Resurgence of Trust in Government." *British Journal of Political Science* 16:431–53.
- Clarke, Harold D. and Allan Kornberg. 1992. "Support for the Canadian Federal Progressive Conservative Party Since 1988." Canadian Journal of Political Science 25:29–53.
- Clarke, Harold D., Nitish Dutt and Allan Kornberg. 1993. "The Political Economy of Attitudes toward Polity and Society in Western European Democracies." *Journal of Politics* 55(4):998–1021.
- Cohen, Jeffrey E. 1997. Presidential Responsiveness and Public Policy Making. Ann Arbor: University of Michigan Press.
- Cremer, David De and Steven L. Blader. 2006. "Why Do People Care About Procedural Fairness? The Importance of Belongingness and Attending to Procedures." *European Journal of Social Psychology* 36(2):211–228.
- Curini, Luigi, Willy Jou and Vincenzo Memoli. 2012. "Satisfaction with Democracy and the Winner/Loser Debate: The Role of Policy Preferences and Past Experience." *British Journal of Political Science* 42:241–261.
- Dahl, Robert A. 1956. A Preface to Democratic Theory. University of Chicago Press.
- Dalton, Russel J. 1999. Political Support in Advanced Industrial Democracies. In *Critical Citizens: Global Support for Democratic Government*, ed. Pippa Norris. Oxford University Press.
- Davis, Nicholas T. 2014. "Responsiveness and the Rules of the Game: How Disproportionality Structures the Effects of Winning and Losing on External Efficacy." *Electoral Studies* 36:129–136.

- den Bos, Kees Van, Henk A.M. Wilke and E. Allan Lind. 1998. "When Do We Need Procedural Fairness? The Role of Trust in Authority." *Journal of Personality and Social Psychology* 75(6):1449–1458.
- Donovan, Todd and Jeffrey Karp. 2016. Minding the Gap Between Expectations and Perceptions of Democracy. Paper prepared for the Annual Meeting of the American Political Science Association San Francisco, CA: .
- Döring, Holger and Philip Manow. 2015. Parliaments and Governments Database (Parlgov): Information on parties, elections and cabinets in modern democracies. Development version. University of Bremen Centre for Social Policy Research.
- Downs, Anthony. 1957. Economic Theory of Voting. Harper and Row.
- Easton, David. 1965. A Systems Analysis of Political Life. New York: Wiley.
- ECPR. 2016. Political Data Yearbook. Wiley.
- Evans, Geoffrey and Stephen Whitefield. 1995. "The Politics and Economics of Democratic Commitment: Support for Democracy in Transition Societies." *British Journal of Political Science* 25(4):485–514.
- Evans, Peter B., Dietrich Rueschemeyer and Theda Skocpol, eds. 1985. *Bringing the State Back In.* Cambridge Univ Press.
- Farrell, David M. and Ian McAllister. 2006. "Voter Satisfaction and Electoral Systems: Does Preferential Voting in Candidate-Centered Systems Make a Difference?" European Journal of Political Research 45:723–749.
- Ferejohn, John A. 1986. "Incumbent Performance and Electoral Control." *Public Choice* 50(1):5–25.
- Fishburn, Peter C. and William V. Gehrlein. 1977. "Towards a Theory of Elections with Probabilistic Preferences." *Econometrica* 45:1907–1924.
- Fuchs, Dieter. 1999. The Democratic Culture of Unified Germany. In *Critical Citizens: Global Support for Democratic Government*, ed. Pippa Norris. Oxford: Oxford University Press.
- Fuchs, Dieter, Giovanna Guidorossi and Palle Svensson. 1995. Support for the Democratic System. In *Citizens and the State*, ed. Hans-Dieter Klingemann and Dieter Fuchs. New York: Oxford University Press.
- Gabriel, Oscar W. 1989. "Regierungswechsel und politische Unter- stuitzung:Implikationen des Parteienwettbewerbs fur die Struktur politischer Unterstiitzung in der Demokratie." *Politische Vierteljahresschrift* 30:75–93.
- Gallagher, Michael. 1991. "Proportionality, Disproportionality, and Electoral Systems." *Electoral Studies* 10:33–51.

- Gallagher, Michael. 2015. "Election Indices Dataset." Dataset .
- Geer, John G. 1996. From Tea Leaves to Opinion Polls: A Theory of Democratic Leadership. Columbia University Press.
- Ginsberg, Benjamin and Robert Weissberg. 1978. "Elections and the Mobilization of Popular Support." American Journal of Political Science 22(1):31–55.
- Grönlund, Kimmo and Maija Setälä. 2007. "Political Trust, Satisfaction, and Voter Turnout." Comparative European Politics 5:400–422.
- Harmel, Robert and John Robertson. 1986. "Government Stability and Regime Support: A Cross-National Analysis." *Journal of Politics* 48:1029–1040.
- Hobolt, Sara Binzer and Robert Klemmensen. 2008. "Government Responsiveness and Political Competition in Comparative Perspective." *Comparative Political Studies* 41(3):309–337.
- Howell, Patrick and Florian Justwan. 2013. "Nail-biters and No-contests: The Effect of Electoral Margins on Satisfaction with Democracy in Winners and Losers." *Electoral Studies* 32:334–343.
- Kaase, Max and Kenneth Newton. 1995. Beliefs in Government. New York: Oxford University Press.
- Karp, Jeffrey and Susan Banducci. 2008. "Political Efficacy and Participation in Twenty-Seven Democracies: How Electoral Systems Shape Political Behavior." British Journal of Political Science 38(2):311–334.
- Karp, Jeffrey, Susan Banducci and Shaun Bowler. 2003. "To Know it is to Love it: Satisfaction with Democracy in the European Union." *Comparative Political Studies* 36(3):271–292.
- Kittilson, Miki Caul and Leslie Schwindt-Bayer. 2010. "Engaging Citizens: The Role of Power-Sharing Institutions." *The Journal of Politics* 72(4):990–1002.
- Klingemann, Hans-Dieter. 1999. Mapping Political Support in the 1990s: A Global Analysis. In *Critical Citizens: Global Support for Democratic Government*, ed. Pippa Norris. Oxford: Oxford University Press.
- Kornberg, Allan and Harold D. Clarke. 1994. "Beliefs about Democracy and Satisfaction with Democratic Government: The Canadian Case." *Political Research Quarterly* 47:537–63.
- Kotzian, Peter. 2011. "Public Support for Liberal Democracy." International Political Science Review 32(1):23–41.

- Kuechler, Manfred. 1986. A Trend Analysis of System Support in West Germany, 1976-1986. Presented at the annual January meeting of the Southern Political Science Association. Atlanta, GA.
- Kuechler, Manfred. 1991. "Issues and Voting in the European Elections 1989." European Journal of Political Research 19(1):81–103.
- Lambert, Robert D., James E. Curtis, Steven D. Brown and Barry J. Kay. 1986. "Effects of Identifaction with Governing Parties on Feelings of Political Efficacy and Trust." Canadian Journal of Political Science 19:705–728.
- Lijphart, Arend. 1984. Democracies: Patterns of Majoritarian and Consensus Government in Twenty-One Countries. Yale University Press.
- Lijphart, Arend. 1999. Patterns of Democracy. Yale University Press.
- Lijphart, Arend. 2012. Patterns of Democracy: Government Forms and Performance in Thirty Six Countries. Yale University Press.
- Lijphart, Arend and Don Aitkin. 1994. Electoral Systems and Party Systems: A Study of Twenty-Seven Democracies, 1945-1990. Oxford University Press.
- Linde, Jonas and Joakim Ekman. 2003. "Satisfaction with Democracy: A Note on a Frequently Used Indicator in Comparative Politics." European Journal of Political Research 43(3):391–408.
- Lipset, Seymour Martin. 1959. "Some Social Requisites of Democracy: Economic Development and Political Legitimacy." American Political Science Review 53(1):69–105.
- Lockerbie, Brad. 1993. "Economic Dissatisfaction and Political Alienation in Western Europe." European Journal of Political Research 23:281–293.
- Marsh, Michael. 2007. "Candidates or Parties? Objects of Electoral Choice in Ireland." Party Politics 13(4):500–527.
- Marshall, M. G., K. Jaggers and T. R. Gurr. 2014. "Polity IV Dataset." Polity Iv Project, Political Regime Characteristics and Transitions, 1800-2014.
- Muller, Edward N. and Thomas O. Jukam. 1977. "On the Meaning of Political Support." American Political Science Review 71(4):1561–1595.
- Nadeau, Richard and André Blais. 1993. "Accepting the Election Outcome: the Effect of Participation on Losers' Consent." *British Journal of Political Science* 23:553–563.
- Norris, Pippa. 1999. Institutional Explanations for Political Support. In *Critical Citizens:* Global Support for Democratic Government, ed. Pippa Norris. Oxford University Press.
- Norris, Pippa. 2014. Why Electoral Integrity Matters. Cambridge University Press.

- Page, Benjamin I. and Robert Y. Shapiro. 1983. "Effects of Public Opinion on Policy." American Political Science Review 77(1):175–190.
- Page, Benjamin I. and Robert Y. Shapiro. 1992. *The Rational Republic*. Chicago: University of Chicago Press.
- Pitkin, Hanna F. 1967. The Conception of Representation. University of California Press.
- Powell, G. Bingham. 1982. Contemporary Democracies: Participation, Stability, and Violence. Cambridge, MA: Harvard University Press.
- Powell, G. Bingham. 1986. "Extremist Parties and Political Turmoil: Two Puzzles." American Journal of Political Science 30:357–378.
- Powell, G. Bingham. 1989. "Constitutional Design and Citizen Electoral Control." *Journal of Theoretical Politics* 1:107–130.
- Powell, G. Bingham. 2000. Elections as Instruments of Democracy: Majoritarian and Proportional Visions. Yale University Press.
- Rasinski, Kenneth A. and Tom R. Tyler. 1988. "Fairness and Vote Choice in the 1984 Presidential Election." *American Politics Quarterly* 16(1):5–24.
- Sartori, Giovanni. 1997. Comparative Constitutional Engineering: An Inquiry into Structures, Incentives, and Outcomes. New York: New York University Press.
- Schedler, Andreas and Rodolfo Sarsfield. 2007. "Democrats with Adjectives: Linking Direct and Indirect Measures of Democratic Support." European Journal of Political Research 46(5):637–659.
- Singh, Shane P. 2014. "Not All Election Winners are Equal: Satisfaction with Democracy and the Nature of the Vote." *European Journal of Political Research* 53(2):308–327.
- Singh, Shane P., Ekrem Karakoç and André Blais. 2012. "Differentiating Winners: How Elections Affect Satisfaction with Democracy." *Electoral Studies* 31(1):201–211.
- Singh, Shane P., Ignacio Lago Lago and André Blais. 2011. "Winning and Competitiveness as Determinants of Political Support." *Social Science Quarterly* 92(3):695–709.
- Steenbergen, Marco R. and Bradford S. Jones. 2002. "Modeling Multilevel Data Structures." American Journal of Political Science 46(1):218–237.
- Stimson, James A., Michael B. Mackuen and Robert S. Erikson. 1995. "Dynamic Representation." *American Political Science Review* 89(3):543–565.
- Taagepera, Rein. 2002. Designing Electoral Rules and Waiting for an Electoral System to Evolve. In *The Architecture of Democracy: Constitutional Design, Conflict Management, and Democracy*, ed. A. Reynolds. Oxford: Oxford University Press.

- Weaver, R. Kent and Bert A. Rockman. 1993. Do Institutions Matter? Government Capabilities in the United States and Abroad. Washington, DC: Brookings Institution Press.
- Weil, Frederick D. 1989. "The Sources and Structure of Legitimation in Western Democracies: A Consolidated Model Tested with Time-Series Data in Six Countries Since World War II." *American Sociological Review* 54(5):682–706.
- Weissberg, Robert. 1978. "Collective vs. Dyadic Representation in Congress." *American Political Science Review* 72(2):535–547.
- Wlezien, Christopher. 1995. "The Public as Thermostat: Dynamics of Preferences for Spending." American Journal of Political Science 39:981–1000.
- Wlezien, Christopher. 1996. "Dynamics of Representation: The Case of US Spending on Defense." British Journal of Political Science 26(1):81–103.
- Zielinski, Jakub. 2002. "Translating Social Cleavages in Party Systems: The Significance of New Democracies." World Politics 54:184–211.

## Appendix

 $\textbf{Table A1.} \ \, \textbf{Binary Logit Regression Coefficients - Satisfaction with Democracy:} \ \, \textit{H1}$ 

Independent Variable	H1 Model Coeff.	S.E.
Fixed effects		
Loser	-0.602***	(0.017)
Regime Age	0.013***	(0.003)
Female	-0.056***	(0.016)
Age	-0.001*	(0.001)
Education	0.097***	(0.008)
Employed	0.078***	(0.018)
Const	0.034	(0.171)
$Random\ Terms$		
Intercept Variance	0.743	(0.123)
$\chi^2$	1494.47	
Log Likelihood	-45932.058	
N individuals	83921	
N country-years	75	

Note: Cell entries are logit coefficients with std. errors in parentheses. \*\*\* =  $p \le 0.001$ , \*\* =  $p \le 0.001$ , and \* =  $p \le 0.05$ , two-tailed test.

 $\textbf{Table A2.} \ \, \textbf{Multilevel Ordinal Logit Regression Coefficients - Satisfaction with Democracy:} \ \, \textit{H4} \ \, \textbf{with Discrepancy interaction}$ 

	Model 3	
Independent Variable	Coeff.	S.E.
Joint Loser		
National Loser, District Winner	0.401***	(0.035)
National Winner, District Loser	0.553***	(0.025)
National Winner, District Winner	0.684***	(0.030)
Discrepancy	0.006	(0.005)
Joint Loser $\times$ Discrepancy		
National Loser, District Winner	-0.004	(0.010)
National Winner, District Loser	-0.001	(0.007)
National Winner, District Winner	-0.019*	(0.007)
Logged DM	-0.056	(0.032)
Logged GDP Per Capita	-0.516***	(0.129)
Regime Age	-0.007**	(0.002)
Female	-0.125***	(0.017)
Age	-0.002**	(0.001)
Education	0.083***	(0.008)
Employed	0.051**	(0.019)
Cut 1	-7.878***	(1.312)
Cut 2	-5.843***	(1.312)
Cut 3	-2.744***	(1.312)
Random Terms		
Country Intercept Variance	1.344	(0.421)
District Intercept Variance	0.041	(0.010)
$\chi^2$	1361.16	
Log Likelihood	-59492.112	
N individuals	58436	
N districts	167	
N countries	27	

Note: Cell entries are logit coefficients with std. errors in parentheses. In Model 3, the excluded category for Joint Loser is National Loser, District Loser. \*\*\* =  $p \le 0.001$ , \*\* =  $p \le 0.01$ , and \* =  $p \le 0.05$ , two-tailed test.

Descriptive statistics and coding details for the variables utilized in this study can also be found in the tables below.

Table A3. Descriptive Statistics

Variables	Obs.	Mean	Std. Dev.	Min.	Max.
Satisfaction	83,864	2.74	0.75	1	4
Loser	83,864	0.48	0.50	0	1
National Loser	83,864	0.48	0.50	0	1
District Loser	58,436	0.70	0.46	0	1
Joint Loser	58,436	2.32	1.21	1	4
Vote/Seat Share Discrepancy	83,864	2.17	4.70	-12.78	20.38
Logged GDP Per Capita	83,864	10.35	0.41	8.92	11.12
Regime Age	83,864	60.37	39.55	0	134
Logged DM	83,743	1.97	2.03	0	6.91
Female	83,864	0.51	0.50	0	1
Age	83,864	48.15	16.70	17	106
Education	83,864	3.28	1.20	1	5
Employed	83,864	0.58	0.49	0	1

Here I provide additional models which also control for system-level disproportionality, or *Gallagher* — which is coded as a continuous interval-level variable measuring system disproportionality based on the widely used Gallagher index.<sup>29</sup> <sup>30</sup> The scale ranges from 0 to 100 with lower values indicating less disproportionality and higher values indicating more disproportionality. Given that one of my key independent variables is a party-level

<sup>&</sup>lt;sup>29</sup>For just a few examples, see Lijphart and Aitkin (1994); Anderson et al. (2005); Blais and Bodet (2006); Karp and Banducci (2008); Lijphart (2012); Davis (2014); Donovan and Karp (2016).

<sup>&</sup>lt;sup>30</sup>For the data itself, see Gallagher (1991, 2015).

measure of vote/seat share disproportionality, or discrepancy, it is important to parse out the effects of system-level disproportionality to ascertain the effects of a party's vote/seat share discrepancy on individual voters.<sup>31</sup> It is derived from the following equation:

$$LSq = \sqrt{\frac{1}{2} \sum_{i=1}^{n} (V_i - S_i)^2}$$
 (2)

Where LSq is the disproportionality, V is the vote share, S is the seat share, and i is a given party and n is the number of parties.

 $<sup>^{31}</sup>$ I will also note that this measure is not correlated with my key independent variable, vote-seat discrepancy.

 Table A4. Variable Details

Variable Name	Variable Description	Variable Coding	Variable Source
Satisfaction	R's Satisfaction with the way Democracy operates	1 = satisfied; 0 = dissatisfied	Survey instruments from CSES Modules 1-4 (A3001, B3012, C3019, D3017).
Loser	R's status as an electoral loser	1 = loser, meaning R voted for a party that did not become part of the government (the party received no cabinet portfolios); 0 = winner, meaning R voted for a party that became part of the government (the party got at least one cabinet portfolio).	Macro-Level variables from CSES Modules 2-4 (B5009, C5013, D5013) and data from Parlgov and the Political Data Yearbook.
Discrepancy	The difference between a R's chosen party's seat share and its vote share	R's party's seat share minus vote share. Positive values indicate that R's party was benefited by the discrepancy (meaning it received more a greater percentage of seats than votes), while negative values indicate that R's party was disadvantaged (receive a lesser percentage of seats than votes). Continuous, ranging (theoretically) from 0 to 100.	CSES Modules 1-4 (Vote Share variables: A5005, B5001, C5001, D5001; Seat Share variables: A5006, B5002, C5002, D5002).

**Table A5.** Variable Details (cont'd)

Variable Name	Variable Description	Variable Coding	Variable Source
Gallagher	Gallagher's Index of Party-Level Disproportionality	Variable derived from the following equation: $LSq = \sqrt{\frac{1}{2}\Sigma_{i=1}^n(V_i - S_i)^2}$	Gallagher (2015); Continuous, ranging (theoretically) from 0 to 100.
Female	R's Gender	1 = Female; $0 = Male$	Survey Instruments from CSES Modules 1-4 (A2002, B2002, C2002, D2002).
Age	R's Age in Years	R's Age in Years	Survey Instruments from CSES Modules 1-4 (A2001, B2001, C2001, D2001).
Education	R's highest level of education	the language of the language o	Survey Instruments from CSES Modules 1-4 (A2003, B2003, C2003, D2003).
Employed	R's Employment Status	1 = Employed; 0 = Unemployed	Survey Instruments from CSES Modules 1-4 (A2007, B2010, C2010, D2010).

**Table A6.** Variable Details (cont'd)

Variable Name	Variable Description	Variable Coding	Variable Source
Logged DM	The Log of the magnitude each respondent's district	Continuous, ranging from 0 to 6.9	CSES Modules 1-4 (A4001, B4001, C4001, D4001).
National Loser	R's status as a national electoral loser	1 = loser, meaning R voted for a party that did not become part of the government (the party received no cabinet portfolios); 0 = winner, meaning R voted for a party that became part of the government (the party got at least one cabinet portfolio).	Macro-Level variables from CSES Modules 2-4 (B5009, C5013, D5013) and data from Parlgov and the Political Data Yearbook.
District Loser	R's status as a district electoral loser	1 = loser, meaning R voted for a party that did not get at least plurality of the district-level vote; 0 = winner, meaning R voted for a party that did receive at least a plurality of the district-level vote.	District-Level variables from CSES Modules 1-4 (A4004, B4004, C4004, D4004).
Joint Loser	R's status as a national and district electoral loser	<ul> <li>1 = National and District Loser; 2 = National Loser, District Winner; 3</li> <li>= National Winner, District Loser; 4 = National and District Winner</li> </ul>	Based off the codings of National Loser and District Loser, which in turn are based on survey instruments from CSES Modules 1-4 (A4004, B4004, C4004, D4004, B5009, C5013, D5013) and data from Parlgov and the Political Data Yearbook.

## Vita

Casey Knott is a native of Rolesville, North Carolina. He completed his Bachelors degree in Political Science at Southeastern Louisiana University in the Fall of 2012. He expects to graduate in Summer 2017. Thereafter, he will being continuing his studies at Rice University where he hopes to complete his doctorate in Political Science while further researching political phenomena situated at the intersection of electoral institutions and mass behavior.