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POSITIVIST EXPERIMENTS AND OPINION POLLING IN THE SOCIAL SCIENCES IN THE EUA: LIMITATIONS (AND STRENGTHS!) OF POSITIVISTIC RATIONALITY IN ITS HEARTLAND”

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Abstract

A criticism of positivistic rationality has been a strong theme in the epistemology of the science of administration in Brazil. While recognizing the limitations of survey research and of positivism in the social sciences, this paper, from the Directors of the Public Opinion Research Lab at the University of North Florida, points to innovative ways to overcome the challenges of traditional ‘science’ in the social sciences. An example of a research program that utilizes both a natural experiment and a survey experiment is presented.

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The authors thank George Candler for help with some Brazilian context for this paper. Positivism has been a topic of interest in Brazilian research, as evidenced by as many as 191 references in a quick search of the Scielo database. Indeed, at least three papers with specific reference to positivism in the title have been presented at the first four Colóquio Internacional de Epistemologia e Sociologia de Ciência da Administração: Dutra et al (2014), Chevarria and Gomes (2013), and Galvão et al (2014). The latter provide a useful contextual definition for the purposes of this paper. For Galvão and co-authors,

“Positivism is a philosophical conception arising out of the industrial revolution, linked to the European enthusiasm of human progress, which sought the primacy of science, fighting idealistic conceptions and spiritual reality. This primacy of science assumes that the only methods of valid knowledge... are the physical and natural sciences, rather than the opposing social conceptions of idealism and spiritualism.” (Galvão et al, 2014, p. 3)

Though positivism has been a contentious epistemology, and granted, the measurement of any concept can have its drawbacks, the expansion of knowledge relies on transparent methodology and replicable analysis. Measurement of concepts in the social sciences can be complicated, and in some sense are arbitrary. However, in order to progress in search of answers to questions, we must start somewhere. The most interesting of questions assess causal claims about factor X causing outcome Y. Absent the ability to conduct traditional experiments in the social sciences, researchers are often left to infer causality from correlated relationships. All else equal, clearly this is not the optimal way to conduct research and test hypotheses. Fortunately, with creative research designs taking advantage of happenings within our society, we can use these “naturally occurring” events to approximate the traditional experiment. Absent these natural experiments, survey research provides us with similar opportunities. Another approach that is particularly suited to causal inference is a survey experiment, which allows researchers to randomly rotate the order of two similar questions that vary in a specific manner. That difference in question wording, when randomly assigned to respondents, can give insights into the varying effects of question wording or in the study presented in this paper, the effect of the order of proposition appearing in a ballot in a recent election.

Public opinion polling has been a topic of scholarly research at least since Herbert Blumer’s (1948) “Public Opinion and Public Opinion Polling.” While probably over-developed in the United States, our outside perspective on political polling in Brazil

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suggests that the tool may be relatively under-developed in Brazil. *The Economist* newsmagazine, for instance, reported on the “dearth of data. Fewer than 40 usable national polls have been published in Brazil so far,” while at least 4000 had been done in the US during the 2012 campaign (2014). As the election approached, the candidates expressed doubts about the accuracy of opinion polls (Biller and Edgerton 2014). These doubts were confirmed by Francisco Cantú and Marco Morales (2014), who analysed the accuracy of these limited polls in Brazil, finding an over-estimation of support for Dilma Rouseff, and under-estimate of support for Aécio Neves.

Without addressing the validity of the natural science rejections of the scientific nature of the social sciences, this paper illustrates two examples of the utilization of natural science methods in the social science, through a specific event in California during the 2010 general election cycle. Prior to California’s 2010 General Election, the ballot language for two propositions was disputed and challenged in court. For both Proposition 22, intended to change the allocation of state and local tax revenues, and Proposition 23, intended to overturn California’s landmark global-warming law, Fresno County failed to make the court-ordered changes. The election proceeded with the unchanged ballot language in Fresno County and the newly adjusted ballot language throughout the rest of the state. In addition to the wording of ballot measures or propositions, other experimental methods can be used to gain insight into human decision-making. In an other paper, survey experiments are used to assess the impact of ballot order on a voter’s decision-making process (Binder and Kousser 2014).

Natural and Survey Experiments

If people can think about an issue or a candidate in multiple ways, they are susceptible to framing effects. Numerous studies have established that subjects’ reported attitudes vary with the context of the question or that their decisions vary with how their options are presented (Chong and Druckman 2007; Schwarz 2007). Since most, if not all of the framing literature has used some form of survey or laboratory experiments, there are lingering questions about whether or not those effects persist in a real world environment. Do frames actually affect peoples’ decisions at the ballot box?

Ideally, scholars would replicate laboratory studies using observational methods during campaigns, but it is often infeasible to do so. The campaign environment makes it difficult to tease out how particular frames or messages affect peoples’ electoral choices. One barrier, tracking campaign advertising, is expensive and even when it is done, the data are not available to the scholarly community until years after an election (for proprietary reasons).

Occasionally, events during a campaign afford scholars the opportunity to gain leverage over elusive answers to such important questions. In California’s general election in 2010, one of the state’s 58 counties made a crucial error. Earlier that year, California

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courts ordered then-Attorney General Jerry Brown to change the official language for Propositions 22 and 23 because the court feared that Brown's approved titles and descriptions would bias the results. The ballots all over the state were changed to incorporate the new wording for the two measures with one notable exception: Fresno County failed to update their English language ballots for either measure. By the time the county was alerted to its mistake, the ballots were printed with the original language for Propositions 22 and 23. It was too late to reprint all of the ballots, so the election in Fresno County proceeded with the incorrect language for those two propositions.

Fresno County's "mistake" presents us with a natural experiment and an opportunity to test framing effects in an election. We investigate whether Propositions 22 and 23 performed differently in Fresno compared to counties that successfully changed their ballots in time. The two propositions deal with substantively different policies, Proposition 22 involves state and local funding, while Proposition 23 contains changes to a pollution control law. Optimally our comparison of propositions would include nearly identical topics, however, that opportunity was not presented. In order to bolster our claims about the role that campaigns can play in mitigating framing effects, we conducted an experiment to alleviate concerns that the issues in the propositions are not driving the differential effects in our findings. The survey experiment was conducted in Duval County, Florida, an area that was not exposed to the political environment surrounding the California propositions. Thus, our study is one of the first to contrast observational evidence of framing effects with experimental survey results.

The frames in our survey experiment significantly affected the level of support for each ballot measure, but these effects were not replicated in the election results. Using county-level election and census data, we find that in Fresno County the change in Proposition 23's ballot title did not significantly affect its support while the change in Proposition 22's fiscal analysis did. We suggest that the disparity between the election results and our survey experiment is caused by the variation in campaign intensity between the two propositions. Proposition 23 engendered a significantly more vigorous campaign than Proposition 22, also giving us an opportunity to observe whether framing effects vary by campaign intensity. Framing effects are more likely to endure in a low-information environment where campaigns do not spend a lot of money and the media do not devote much attention to the race (like most ballot proposition campaigns, with Proposition 23 as a notable exception). Frames in higher intensity environments, on the other hand, are less likely to affect election results because of the increased awareness and knowledge within the electorate.

Framing in Ballot Propositions

In this paper, we take framing research one important step further by testing framing effects in *both* an experimental setting and in an actual election. In California's

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General Election in 2010, the state was ordered to change the language for two ballot propositions and one of its 58 counties failed to make the appropriate modifications in time for the election. The natural experiment compared election results in Fresno County to results in the remaining counties using the court ordered language. We compared these results to the findings of a survey experiment we conducted testing the competing language for each of the two propositions in the natural experiment.

Direct democracy elections are unique because they ask voters to approve or reject proposed policies rather than choosing between competing candidates of opposing parties. For each proposition, voters read a title and a short paragraph summarizing the policy written by a state official. We acknowledge the abundance of literature demonstrating that most citizens are not political experts (Delli Carpini and Keeter 1996) and do not pay much attention to politics on a daily basis (Downs 1957). Yet, we assume that if citizens are going to vote on a ballot question, they will read a proposition's title and summary.

The way that a ballot question is phrased can affect its popularity among the electorate. Support for a proposition can shift if it mentions likeable population groups and not others, or if it emphasizes the benefits of a proposed law instead of its costs (Bowler and Donovan 2010). In Switzerland in 2000, two competing initiatives aimed at modifying eligibility rules in the Swiss pension system were similar in content but they differed in how they emphasized which groups would be affected by the proposed policy changes. The title for Initiative 469 emphasized a lower retirement age for women while Initiative 470 emphasized a lower retirement age for everyone. The latter received 6.5 percentage points more support than the initiative emphasizing changes in the retirement age for women (Bütler and Maréchal 2007).

It should be no surprise then that supporters and opponents of propositions spend millions of dollars on lawsuits over the language in a title or proposition, as we saw in the two lawsuits concerning California Propositions 22 and 23 in 2010 (League of California Cities 2010, Rogers 2010). Prior to the 2010 California General Election, the courts ordered the state to change the original language for both propositions. Judges ruled that the phrasing in the title for Proposition 23 and the fiscal impact statement for Proposition 22 would likely bias voters.

All of the counties in California changed their ballots accordingly, except for Fresno County. The County Clerk, Victor Salazar, blamed the oversight on budget cuts and understaffing (Fontana and Benjamin 2010). By the time the County Clerk's office was alerted to its mistake, the absentee ballots had already been sent out and it was too late to reprint the polling station ballots or send a mail notification to absentee voters. The election proceeded with the incorrect fiscal impact statement for Proposition 22 and the incorrect ballot title for Proposition 23. Salazar claimed that he would send out news alerts and post signs in all polling places to alert voters to the mistake (Fontana and Benjamin 2010). Local network affiliates like ABC's Channel 30 and Fox's Channel 26 devoted stories on their evening news programs to notify voters of the ballot mistake on October 29, 2010, just a

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few days before the election (ABC 30 Action News Live at 6pm 2010; KPMH Channel 26 2010).³

The error in Fresno only occurred on the ballots printed in English as the Spanish language ballots were updated properly. In an ideal world, this would present a perfect opportunity to compare the effects due to the differences in the English and Spanish ballots. Unfortunately, the state of California does not collect data on the vote totals for each proposition based on ballot language. Nor does Fresno even keep track of the number of ballots cast in different languages, ergo we lack any concrete empirical evidence to properly estimate any treatment effects beyond the results from the general models that assume all absentee and polling station voters were exposed to the identical treatment for each method of voting – which of course Spanish language voters were not.

Even though a bare majority of Fresno residents are Latino, 69 percent of Fresno citizens speak only English (U.S. Census Bureau 2014). Of those citizens who speak a language other than English, 22 percent speak Spanish; however, only 26 percent of those citizens speak English “less than very well” (U.S. Census Bureau 2014). Assuming that English only speakers and those who speak English very well would vote using the English ballot, that would translate to just less than 6 percent of the potential voting population who would not have been exposed to the treatment (the original ballot language). However, Latinos are not equally represented in the electorate (Lopez 2011) or at the ballot box (Hero and Campbell 1996). Additionally, there is evidence that Latinos are even more underrepresented during midterm elections (Cassel 2002). Considering non-English speaking Latinos are less likely to turnout to vote (DeSipio 1996; Parkin and Zlotnick 2011), the likely percentage of the voting population in Fresno that used Spanish language ballots was undoubtedly quite small and should not impact our estimates very much at all.

The affected language in Proposition 22 represents an issue frame because the new language emphasizes local funding at the expense of the state. Proposition 22 intended to prevent the state government from borrowing from funds that are redistributed to local governments. It declared that the state could not take local revenue intended for transportation, redevelopment or other local projects and services (Secretary of State 2010a). In 2010, lawmakers diverted \$1 billion dollars originally intended for local transportation funding to help reduce the state’s enormous budget deficit (Gardner 2010). Proposition 22 was an attempt by many local governments to prevent the state from continuing to raid locally designated funds to reduce the state’s enormous budget deficits resulting from the 2008 recession.

The fiscal impact statement as originally written indicated that the state would lose funds as a result of the measure’s passage without explicitly stating that the measure’s

³ We suspect that the local CBS and NBC affiliates also covered the ballot mistakes either that night or at some other time before Election Day because news outlets competing for the same audience tend to cover the same stories (see Hamilton (2004) for a thorough discussion of the market incentives for pack journalism). Unfortunately those stations do not have websites with searchable archives of past broadcasts.

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financial gains would go to local government. We consider this to present a “state” funding frame because it focuses the voter’s attention on losses in state revenues. The proponents of the measure successfully petitioned the courts to have the word “local” inserted several times into that statement. The fiscal impact summary as ordered by the judge was as follows:

“Due to restrictions on state authority over fuel and property taxes, the state would have to take alternative actions—probably in the range of \$1 billion to several billion dollars annually. This would result in both: Reductions in General Fund program spending and/or increases in state revenues of those amounts. Comparable increases in funding for state and local transportation programs and local redevelopment.”

In the original fiscal impact summary, the last sentence above instead read, “Comparable increases in transportation and redevelopment resources.” (Fairbanks 2010)

For more than 30 years, citizens have consistently viewed local government as superior to state government when it comes to getting more out of their tax dollars (Cole and Kincaid 2000). The new language emphasizes local funding at the expense of the state and we expect the proposition to get less support in Fresno County compared to the rest of the state. Fresno County voters were exposed to the more neutral language, while the rest of the state saw the court-ordered changes. Given the state’s perennial fiscal problems and the consequences that local governments faced as a result of the state’s budgeting maneuvers, we expect voters who were exposed to the court ordered changes to be more likely to support Proposition 22 than Fresno County voters (who were not). For the remainder of the paper, we will refer to this proposition as the Local Funding proposition.

H1: Support for Proposition 22, the Local vs. State Funding proposition, will be lower in areas where voters are exposed to the state funding frame than in areas exposed to the local funding frame.

Proposition 23, on the other hand, would have suspended AB32, the “Global Warming Solutions Act” that was passed in 2006 and mandated California carbon emissions to be capped by 2020 at what their levels were in 1990 (Air Resources Board 2012). Its implementation was set to begin in 2012. There was vocal opposition to AB32 since its initial passage and it coalesced for the 2010 election in the Yes on 23 Campaign. The initial ballot wording proposed by Attorney General Brown referred to beneficiaries of the proposition as “major polluters.” It was this language that was considered potentially biasing and the judge ordered this phrase to be substituted in the ballot title by the term, “sources of emissions.” It also made clear in the new ballot title that the only law that would be suspended by the measure was AB32, rather than all pollution laws as the initial title implied. The ballot titles before and after the court decision are as follows:

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Old ballot label: “Suspends air pollution control laws requiring major polluters to report and reduce greenhouse gas emissions that cause global warming, until unemployment rate drops to 5.5 percent or less for full year.”

New ballot label: “Suspends implementation of air pollution control law (AB 32) requiring major sources of emissions to report and reduce greenhouse gas emissions that cause global warming, until unemployment rate drops to 5.5 percent or less for full year.” [emphasis added] (Rogers, 2010).

We predict that Fresno County’s voters will be less likely to support Proposition 23 compared to the rest of the state. The “major polluters” frame compared to the more neutral language mandated by the court order represents a tone of wording frame. It suggests to voters that the proposed law would benefit polluters whereas the statewide ballot’s language is much more subtle. The term ‘polluters’ has a negative connotation (Farrimond and Joffe 2006) and we expect voters in Fresno County to support Proposition 23 at lower rates than expected, compared to the rest of the state. For simplicity’s sake, we will refer to Proposition 23 as the Pollution Law proposition for the remainder of the paper.

H2: Support for Proposition 23, the Pollution Law initiative, will be lower in areas where voters are exposed to the negative frame than in areas where voters are exposed to a neutral frame.

Neither the Local Funding nor the Pollution Law propositions had particularly high levels of public awareness. In a September 2010 Field Poll, only 37 percent of respondents were aware of the AB32 ballot question (Field and DiCamillo 2010).⁴ Unfortunately, neither the environment nor local taxation were included as possible choices in questions about the most important issue facing California in PPIC’s polls during the election season. Consequently, we are not able to directly estimate how many Californians were aware of the Local Funding initiative nor whether citizens considered those issues to be important.

The propositions did vary with respect to their news coverage though, suggesting that one was relatively more salient than the other. Newspaper coverage is a reasonable measure of awareness because editors and publishers have incentives to cover the issues that are considered most interesting to their readers (Hamilton 2004; Smith 2001). Newspapers also influence issue salience by visibly discussing the measure. Regardless of whether newspapers increase issue salience or simply report on those topics that are already of interest, the literature shows that voters tend to be more aware of ballot measures with more media coverage than those with less coverage (Nicholson 2003). Figure 1 shows the number of news stories about each proposition in the state’s most popular newspapers (by size of circulation) from July 1 through November 4, 2010.

INSERT FIGURE 1 ABOUT HERE

Perhaps more importantly for our purposes, the two propositions also varied significantly by campaign intensity and we anticipate that the framing effects will differ

⁴ None of the Field or PPIC polls during the election season asked about the Local Funding question.

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across both ballot measures. The most widely used and accepted measure of campaign intensity in non-presidential elections is using campaign expenditures (Kahn and Kenney 1997; Smith and Fox 2001; Sulkin 2001). Campaigns for the Local Funding proposition, both for and against, spent a combined total of \$7,598,480, or a mere 32 cents per eligible voter, while the campaigns for the Pollution Law proposition spent a combined total of \$43,844,959, or \$1.86 per eligible voter (Follow the Money 2011). The Local Funding initiative campaigns spent \$5,914,294 for and \$1,684,185 against. Campaigns for and against the Pollution Law initiative spent \$10,669,814 for and \$33,175,145 against (Follow the Money 2011).

We argue that the substantial differences in campaign spending between both measures means that voters were more likely to be exposed to both sides of the Pollution Law debate than the Local Funding one. Previous work shows that voters also tend to be more aware of ballot measures whose campaigns spend more than measures whose campaigns spend less (Bowler and Donovan 1998; Nicholson 2003). Campaigns surrounding the Pollution Law measure spent six times more than the Local Funding measure's campaigns. Furthermore, even though the "pro" Pollution Law's campaigns spent much less than the "con" campaign, the "con" campaign still spent more than all of the Local Funding campaigns combined. Given the difference in media coverage and campaign intensity between the two ballot questions, we expect the frames to differentially affect the election results.

H3: The expected framing effects on the support for the Local Funding initiative will be greater than the framing effects on the support for the Pollution Law ballot question.

The 2010 California Election – A Natural Experiment

In the natural experiment, we use county-level election results and other data to compare each proposition's results in Fresno County to their level of success in California's remaining counties. One advantage of this analytic strategy is that since ballot propositions are statewide elections, any campaign activity is generally held constant across counties. To get more leverage over potential differences of frames in a real election environment to frames in experiments, we also conducted a survey experiment using eligible voters in Duval County, Florida. We discuss that in the following section.

In order to test H1, Fresno's ballot language serves as the "control" group with the state funding frame for the Local Funding proposition, while the rest of California is the experimental group receiving the local funding frame. Fresno will serve as the experimental group in testing our hypotheses about the Pollution Law proposition (H2) because the county's voters were exposed to the negative frame and the rest of the state was exposed to the neutral frame.

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Fresno County voters differed not only from the rest of the state in the ballot language, but the treatment levels within Fresno County varied as well. Those who voted in person on Election Day were exposed to signs at the polling station indicating the court-ordered altered language. Unfortunately, there are no data about how many voters saw the signs and there is no information about whether the signs were in places where voters could easily see them. Because of this uncertainty and the fact that the incorrect language on the ballot were the last words the voters saw, we cannot predict the level of impact the frames would have, but we still anticipate some framing effects.

Absentee voters, on the other hand, were not exposed to the “correct” language at the polling stations and we suspect that any framing effects in the propositions would be greater among that group than among polling place voters. Many Californians take advantage of the state’s fairly permissive absentee voting policy. Any registered voter is eligible for an absentee ballot and voters may also sign up as permanent absentee voters, ensuring that their county will mail them an absentee ballot thirty days ahead of any state or local election. In 2010, 48 percent of the state’s overall voters were absentee while approximately 53 percent of Fresno County’s voters were (California Secretary of State 2010b). Thus a substantial percentage of Fresno County’s population had less exposure to the court ordered changes to the ballot language. To account for potential differences in treatment effects, we run separate models for Election Day polling station voters and absentee voters.

Data

Our dependent variables for the natural experiment measure the level of support each proposition received for polling stations and absentee ballots respectively. We collected the results for each county from the California Secretary of State (California Secretary of State 2010b). Our key independent variable of interest, the measure’s support in Fresno County compared to the rest of the state, is measured by a dummy variable equaling 1 for Fresno County and 0 otherwise.

Since the treatment in the California election was not truly randomly assigned, we attempt to control for a number of factors that could affect support for each of the propositions. We also sought to develop a model that would provide a very strong prediction of what Fresno’s vote totals “should be” using as many variables that account for political, economic, and demographic factors that could possibly affect support for these two ballot measures. The figures in Table 1 show that the models explain a substantial variation in vote shares across California’s counties.

Partisan Indicators: We control for the percentage of each county’s voters who are registered as Democrats (California Secretary of State 2010c). As another way measuring preferences, we also include vote shares for all of the partisan statewide races and for other statewide propositions in each the county.

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Economic Indicators: Each county's total gross value of agricultural production and the percentage change from 2008 – 2009 (the most recently available data at the time of the proposition campaign) were gathered from the California Department of Food and Agriculture. Each county's unemployment rate as of October 2010 is also controlled for, which was downloaded from California's Employment Development Department's website. We also include a measure of the percentage change in the assessed valuation of property control of each county's redevelopment agency and that data are available from the California State Controller's Office.

Demographic Indicators: We include the percentage of eligible voters per county, available from the CA Secretary of State's website. Also, the percentage of Latinos in each County, available from the U.S. Census Bureau is included. Statistics on the median household income for a family of four in 2010 were available from the U.S. Department of Agriculture's Economic Research Council (2011). We also used each county's level of transportation funding, available from the state's Controller's office. For the Pollution Law proposition, we controlled for cancer rates per 100,000 people, obtained from the National Cancer Institute.

Natural Experiment Results

We find mixed support the hypotheses in our analysis of the California election results. We test H1 and H2 using an ordinary least squares multivariate regression that includes a dummy variable for Fresno County. Table 1 presents four comprehensive models. The dependent variables for the first and third model use county level Election Day polling station support for the ballot questions during Election Day voting at the polling stations. The second and fourth models use county level absentee ballot support for the two propositions.

As expected, we see stronger framing effects among absentee ballots than the polling stations. The absentee voters in Fresno were less likely to support the Local Funding initiative compared to other counties in California. The coefficient for the Fresno dummy variable (-0.11) is statistically significant at the $P < .001$ level. Polling station voters in Fresno still show a statistically significant drop in support (-0.07) for the proposition, but the coefficient for the Fresno dummy variable is about 50 percent smaller than the size of the absentee model. Models measuring support for the Pollution Law measure (Models 3 and 4) follow a very different pattern. Fresno County's coefficients are very small and not statistically significant for either the Fresno absentee or the polling station model of Proposition 23 – Pollution Law.

We argue that the difference in support for the Local Funding initiative in Fresno, along with the variable effects between absentee voters and Election Day voters indicates that frames can affect election results. It also suggests voters got some of the message about changes in the propositions' language. We do, however, acknowledge that we are not able

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to measure the extent to which County employees faithfully implemented the County Clerk's instructions about alerting voters to the ballot language corrections at polling stations.

For our second test with the California county level election returns, we compare the expected values of Fresno County's vote share in support of the propositions to the actual election returns for both the polling station and absentee ballots. The predicted level of support for Proposition 22 was over 74 percent for absentee ballot and 70 percent for polling station votes, yet the actual 'yes' votes in the election returns were substantially lower, approximately 64 percent for each. Table 2 shows that Proposition 22 did more than ten percentage points worse in the absentee ballots than expected and nearly seven percentage points worse at the polling stations. These differences are significant at the $P < .05$ level using a one-tailed test. The absence of the "local" frame in Fresno County significantly reduced backing for the Local Funding initiative, supporting H1 and adding credence to the claims that the framing of ballot measures can have a substantial impact on the outcome of elections.

The test of H2 in Fresno County shows no meaningful difference (less than a single percentage point) between the expected vote share for the Pollution Law measure and the actual election returns. Our prediction that the frame "major polluters" would reduce support for the initiative was not realized in Fresno. Two of the most plausible explanations for this result are either A) the frame "major polluters" is not an effective frame or B) the voters had other information that reduced the effect of this frame. The survey experiment results negate the possibility that the "major polluters frame" is ineffective. Subjects exposed to that frame in the survey experiment were significantly less likely to support the measure compared to the group exposed to the "sources of emissions" language.

In order to shed light on the effectiveness of the two different frames that occurred in these ballot measures, we conducted a survey experiment to test each frame's effectiveness in a neutral, campaign-free environment. The survey experiment was conducted in Duval County, FL using registered voters to test for the potential of framing effects in a more controlled environment. The experiment provides us an opportunity to give a group of randomly selected respondents one version of the ballot wording and a different group of randomly selected respondents a different version of the ballot title. A simple comparison of the mean support levels for each of the propositions allows for a test of both H1 and H2.⁵

⁵ Duval County, Florida is not particularly different than Fresno County, California. Both counties have a population approaching one million residents, have similarly aged adult populations, median household incomes, homeownership rates and both counties were competitive in the 2012 presidential election (U.S. Census Bureau 2012; U.S. Census Bureau 2013). Even though Fresno has a bare majority of Latinos, compared to Duval's predominately white population, there is evidence that Latinos do not disproportionately come out on the losing end of ballot measures (Hajnal, Gerber, and Louch 2002). In the fall of 2011 when the survey experiment was conducted, Duval was different from Fresno in one distinct way; Duval voters were not exposed to any of the campaign activity from the 2010 election in California.

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Voters in direct democracy states are often faced with multiple policy choices and numerous candidates from different levels of government competing for their attention on any given ballot. Multiple races competing for the voters' attention on a single ballot increase the level of cognitive effort required to make decisions. In an effort to replicate the Election Day experience, respondents were asked a series of policy related questions (how to handle the national deficit) and candidate preference questions (presidential matchups with prospective Republican challengers and President Obama). Having respondents think through a series of these other political choices helps mimic the experience of going through a ballot and adds to the comparability of our survey results and the election results in Fresno.

The benefits of using experimental survey data are random assignment of respondents and easy interpretation of results. The survey experiment comparison uses one random selection of respondents as a control group (receiving the "state funding" frame for the Local Funding measure and the neutral "major sources of emissions" frame for the Pollution Law measure) and a second set of respondents (for each proposition) as the experimental group that is given the treatment frames ("local" for the Local Funding ballot question and "major polluter" for Pollution Law).

The survey conducted in Duval County, Florida was in the field from November 7th – 15th, 2011. There were 120 University of North Florida political science undergraduate students that collected 574 completed interviews that took an average of 9 minutes. The survey was conducted through the use of Computer Assisted Telephone Interviewing (CATI) at a 27-station polling laboratory at UNF. A sample of the polling universe was selected through the use of Random-Digit-Dialing methodology. An additional cell phone sample was used to increase representation as well as an overlay sample from census tracts that had more than 30 percent African-American residents. The response rate for the survey was 13.9 percent.⁶ Gender and ethnic origin are weighted to statistics from the Supervisor of Elections for Duval County Registered Voters.⁷

Survey Experiment Results

Duval County can thus serve as an appropriate laboratory to test the effects of frames in a controlled experimental environment, relative to a real life campaign.

⁶ The response rate (Response Rate 4) was calculated according to AAPOR's Standard Definitions (American Association of Public Opinion Researchers 2011).

⁷ Weights range from .82 to 1.91. For non-completes with a working residential and/or cell phone line, up to 5 callbacks were attempted. To ensure a representative sample, calls were made from 5:00 p.m. - 9:00 p.m. Monday through Friday and from 10-2 on Saturday.

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The survey was conducted in the fall of 2011 in Duval County, Florida where there had not been any elections or public discourse dealing with the issues addressed in our ballot measures. Thus, this was conducted in an area where the political information environment with respect to these issues was limited. The differences in ballot language affected each proposition's support in the expected directions. Table 3 presents the results of the survey experiment. Support for the Local Funding measure is positively affected by the addition of the word "local" to the description of the ballot measure. The 7.64 percentage point increase is statistically significant at the .05 level in a one-tailed test. Support for the Pollution Law measure is reduced by the addition of the frame "major polluters", which dropped the support levels by 8.42 percentage points, also statistically significant at the .05 level in a one-tailed test.

Granted, the method of testing the framing effects varied: an actual ballot during a real election compared to a survey conducted on the telephone. However, we do not think that mode effects between a real election and a telephone survey could account for the varying results. Rather, it is the intensity of the campaigns across the different experimental context that seems to matter most. Additionally, if there was a mode induced effect, that effect should have influenced both frames similarly. Consistent results for the "local" frame used in the Local Funding question (see Table 2) establish stability across methods (predicted vote share during elections compared to a survey experiment). Both the survey experiment and predicted Fresno vote shares in Table 2 suggest that the "local" frame increased support for Proposition 22. Conversely, the Pollution Law proposition showed a significant decrease in support when the "major polluters" frame was used in the survey experiment. Since H2 was supported by the survey experiment when there was no campaign activity, we argue that this further suggests that the variation in campaign activity during the elections in 2010 is the reason we see differing results between the election (see Table 2) and survey experiment for the Pollution Law measure. Figure 2 is a two by two diagram that presents the level of campaign activity and the resulting effects of the frames. Our results across the two methods provide valuable support for H3 and suggest that campaigns can mitigate the effects of frames on ballot propositions.

Conclusion

This study builds upon previous work on framing by testing frames in a survey or "laboratory" setting and taking it further by measuring whether those frames affected election results using a natural experiment in California. Proposition 22, the Local Funding measure, had a difference in issues frame while the Pollution Law measure (Proposition 23) featured a tone of wording frame, and they worked as theorized in the survey experiment. Support for the propositions fluctuated significantly between the competing frames in our survey experiment.

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However, only one frame significantly affected the outcome in Fresno County during the 2010 election. In the Local Funding measure, Fresno County voters exposed to “state funding” language frame (both absentee and polling station) were less supportive of the measure. The differences were greater among absentee voters since they voted before Election Day and were not exposed to the “local funding” frame. Conversely, Fresno County voters showed no difference in their support for Proposition 23, the Pollution Law, than the rest of the state.

The second test of the California data extended the first series of tests and showed discrepancies between the predicted levels of support for the Local Funding measure and actual election returns. Similar to the first series of regressions, the Local Funding measure’s support in Fresno was much less than its predicted support, suggesting that it would have done better if voters in Fresno were exposed to the court-ordered language. The “major polluter” frame in Proposition 23 showed no substantive effects in the second test either. We do not see an appreciable difference in support for the Pollution Law in Fresno compared to its predicted level of support.

The differences between the experimental and observational results suggest that the reason why we see support for H1 and not for H2 (i.e. there appears to be a framing effect for Local Funding measure and not the Pollution Law) in the natural experiment is the difference in campaign intensity between the two campaigns. Campaigns for and against Proposition 23, the Pollution Law question, spent six times more money per eligible voter than campaigns for and against the Local Funding question (Proposition 22). We argue that the differences between the two experiments is due to the differences in campaign intensity surrounding the two campaigns and the impact that ballot language frames have on our voting decisions is mitigated by campaign intensity.

If, as we argue, frames have greater impacts in elections that are relatively less intense than those that get more campaign activity, ballot propositions are the elections that would appear to benefit voters most from increased campaigning. Proposition races are typically low information affairs (with the exception of some propositions like Proposition 23, Proposition 8 in California in 2008 or the famous California Proposition 13 decades ago) and consequently voters may be more susceptible to framing effects in campaign rhetoric or ballot language than other elections where citizens have more information about their choices going into the election cycle. Framing effects are difficult to study in a campaign environment using observational methods, but our research should provide scholars with some optimism that either with fortunate circumstances or clever designs, researchers could replicate experimental results in the “real world.” We hope that future research will continue to explore this phenomenon.

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Table 1: Framing Effects in Survey Experiment

	Proposition 22: Issue Frame	Percent Support	Proposition 23: Negatively Toned Frame	Percent Support
Frame	“Local”	51.87	“Polluters”	40.18
Neutral		44.23	“Sources of Emissions”	48.60
Difference		7.64*		-8.42*

Note: Table entries are percentage of support for the proposition

* $p < .05$ in a one-tailed test.

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Table 2: County Level Support for Ballot Proposition 22 and Proposition 23^a

	Proposition 22		Proposition 23	
	Polling Station Model 1	Absentee Model 2	Polling Station Model 3	Absentee Model 4
Fresno	-0.02 (0.02)	-0.05* (0.03)	-0.01 (0.01)	-0.03 (0.02)
Ideology	0.00*** (0.00)	0.00*** (0.00)	0.00 (0.00)	0.00 (0.00)
Percentage Democrat	-0.20 (0.17)	0.06 (0.22)	-0.01 (0.11)	-0.12 (0.11)
Percentage Republican	-0.74*** (0.19)	-0.41 (0.22)	0.04 (0.13)	0.13 (0.12)
Percentage Change Agricultural Revenue	0.00** (0.00)	0.00*** (0.000)	-0.00*** (0.00)	-0.00*** (0.00)
Unemployment Rate	0.48** (0.15)	0.64** (0.20)	0.62*** (0.11)	0.60*** (0.11)
Jerry Brown Governor	-0.47** (0.14)	-0.38** (0.14)	-0.61*** (0.10)	-0.55*** (0.01)
Redevelopment: Increase of Assessed Value	0.00** (0.00)	0.00** (0.00)		
Constant	1.07*** (0.122)	0.79*** (0.13)	0.63*** (0.09)	0.63*** (0.07)
Observations	56 ^b	58	56 ^b	58
Adjusted R-squared	.86	.81	.98	.98

Notes: ^a Analytic weights used to balance county size variation.

^b Two counties in California (Alpine and Shasta) conduct elections by mail only.

Standard errors in parentheses. *** p<0.001, ** p<0.01, * p<0.05 in a two tailed test

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Table 3: Framing Effects in a Natural Experiment

	Proposition 22 Absentee Ballot	Proposition 22 Polling Station	Proposition 23 Absentee Ballot	Proposition 23 Polling Station
Actual Support	64.11	63.47	46.28	48.45
Predicted Support in Fresno County	74.47	70.16	45.48	48.98
Difference	-10.36*	-6.69*	.80	-.47

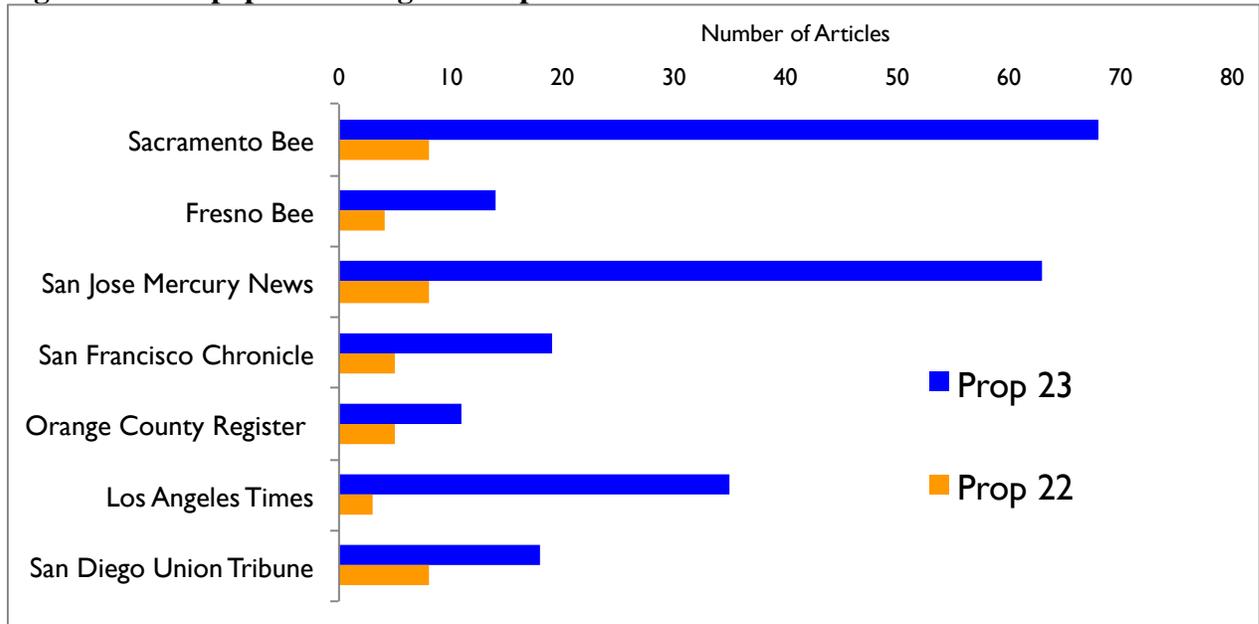
Note: Table entries are percentage of support for the proposition

* $p < .05$ in a one-tailed test.

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Figure 1: Newspaper Coverage of Propositions 22 and 23 in 2010



Note: The total number of each newspaper's articles on Propositions 22 and 23 in 2010.
Source: Compiled by the Authors.

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Figure 2: Campaign Activity and Framing Effects

	Proposition 22	Proposition 23
California General Election November 2010	Limited Campaign Frame has Significant* Effect	<i>Active Campaign</i> <i>Frame has No Effect</i>
Florida Survey November 2011	No Campaign Frame has Significant* Effect	No Campaign Frame has Significant* Effect

Note: * $p < .05$ in a one-tailed test.

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FLORIANÓPOLIS - SC - BRASIL (MARÇO/2015)

References

- American Association for Public Opinion Research (AAPOR). 2011. *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys*. Ann Arbor, MI: AAPOR
- ABC 30 Action News Live at 6pm. 2010. "Fresno Co. Ballot Mistake Could Force Election Do-over." October 29.
<http://abclocal.go.com/kfsn/story?section=news/politics&id=7754815> (accessed on November 15, 2013).
- Air Resources Board. "Assembly Bill 32: Global Warming Solutions Act." California Environmental Protection Agency, <http://www.arb.ca.gov/cc/ab32/ab32.htm>, (accessed January 3, 2012).
- Berelson, Bernard, Paul Lazarsfeld, and William McPhee. 1954. *Voting: A Study of Opinion Formation in a Presidential Campaign*. Chicago: University of Chicago Press.
- Biller, David and Annad Edgerton (2014). "Brazil Candidates Cast Doubt on Poll Companies as Vote Nears." *Bloomberg Business* 13 October. Available online, at: <http://www.bloomberg.com/news/articles/2014-10-13/brazil-candidates-cast-doubt-on-polling-companies-as-vote-nears>.
- Binder, Michael and Thad Kousser. 2014. "First Come First Served? Experiments on Ballot Order in Direct Democracy Elections." Working Paper. University of North Florida and UC San Diego.
- Blumer, Herbert (1948). "Public Opinion and Public Opinion Polling." *American Sociological Review* 13(5), pp. 542-9.
- Bowler, Shaun and Todd Donovan. 1998. *Demanding Choices: Opinion, Voting and Direct Democracy*. Ann Arbor: University of Michigan Press.
- Bowler, Shaun and Todd Donovan. 2010. "Direct Democracy in the United States." In *The Oxford Handbook of American Elections and Political Behavior*, ed. Jan E. Leighley. New York: Oxford University Press, 531-551.
- Burnett, Craig M. and Vladimir Kogan. 2011. "The Case of the Stolen Initiative: Were the Voters Framed?" *APSA 2010 Annual Meeting Paper*.
<<http://ssrn.com/abstract=1643448>> Accessed July 11, 2011.

V COLÓQUIO INTERNACIONAL DE EPISTEMOLOGIA E SOCIOLOGIA DA CIÊNCIA DA ADMINISTRAÇÃO

FLORIANÓPOLIS - SC - BRASIL (MARÇO/2015)

Bütler, Monika and Michel André Maréchal. 2007. "Framing Effects in Political Decision Making: Evidence from a Natural Voting Experiment." University of St. Gallen Economics Discussion Paper No. 2007-04; *CESifo Working Paper Series No. 1940*. <<http://ssrn.com/abstract=968334>> Accessed July 11, 2011.

California Department of Food and Agriculture. *California Agricultural Production Statistics*. Sacramento, CA: State of California, <http://www.cdfa.ca.gov/statistics/> (July 15, 2011).

California Employment Development Department. *Overview-Labor Market Information*. Sacramento, CA: State of California, <http://www.labormarketinfo.edd.ca.gov/> (July 15, 2011).

California Secretary of State. 2010a. *California Statewide General Election, Tuesday November, 2, 2010, Official Voter Information Guide*. Sacramento, CA: State of California, <http://www.voterguide.sos.ca.gov/> (July 15, 2011).

California Secretary of State. 2010b. "Statement of Vote: November 2, 2010 General Election." <http://www.sos.ca.gov/elections/sov/2010-general/complete-sov.pdf> (July 15, 2012).

California Secretary of State. 2010c. "Voter Registration Statistics By County: Report of Registration as of October 19, 2010." <http://www.sos.ca.gov/elections/sov/2010-general/02-county-voter-reg-stats-by-county.pdf> (July 1, 2011). California State Controller. 2010. *Transportation Planning Agencies Annual Report*. Sacramento, CA: State of California, http://www.sco.ca.gov/ard_locrep_trpa.html (July 15, 2011).

Cantú, Francisco and Marco Morales (2014). "Forecasting the Brazilian Election." *Washington Post* 24 October. Available online, at: <http://www.washingtonpost.com/blogs/monkey-cage/wp/2014/10/24/forecasting-the-brazilian-election/>

Cassel, Carol A. 2002. "Hispanic Turnout: Evidence from Validated Voting Data." *Political Research Quarterly* 55(2): 319-408.

Centers for Disease Control and Prevention. National Cancer Institute. 2012. *Incidence Rate Report for California by County: All Races (Includes Hispanics), Both Sexes, All Cancer Sites, All Ages Sorted by Rate*. Washington, D.C.: Government Printing Office,

V COLÓQUIO INTERNACIONAL DE EPISTEMOLOGIA E SOCIOLOGIA DA CIÊNCIA DA ADMINISTRAÇÃO

FLORIANÓPOLIS - SC - BRASIL (MARÇO/2015)

<http://statecancerprofiles.cancer.gov/incidencerates/index.php?stateFIPS=06&cancer=001&race=00&sex=0&age=001&type=incd&sortVariableName=rate&sortOrder=default> (July 15, 2012).

- Chevarria, Diego Gonzales and Fernando Cesar Russo Gomes (2013). “Relação Entre Observador e Realidade nos Paradigmas Positivist, Interpretativista e Complexo: e aí Juiz, Foi ou Não Foi Pênalti?” III Colóquio Internacional de Epistemologia e Sociologia de Ciência da Administração, Florianopolis, Brazil, March.
- Chong, Dennis and James N. Druckman. 2007. "Framing Theory." *Annual Review of Political Science* 10(1): 103-126.
- Cole, Richard L., and John Kincaid. 2000. “Public Opinion and American Federalism: Perspectives on Taxes, Spending, and Trust.” *Publius: The Journal on Federalism* 30(1): 189-201.
- Delli Carpini, Michael X. and Scott Keeter. 1996. *What Americans Know About Politics and Why It Matters*. New Haven: Yale University Press.
- DeSipio, Louis. 1996. *Counting on the Latino Vote: Latinos as a New Electorate*. Charlottesville: University of Virginia Press.
- Downs, Anthony. 1957. *An Economic Theory of Democracy*. New York: Harper and Row.
- Druckman, James N. 2001. “The Implications of Framing Effects for Citizen Competence.” *Political Behavior* 23: 225–256.
- Druckman, James N. 2004. “Political Preference Formation: Competition, Deliberation, and the (Ir)relevance of Framing Effects.” *American Political Science Review* 98 (4): 671-686.
- Druckman, James N., and Kjersten R. Nelson. 2003. “Framing and Deliberation.” *American Journal of Political Science* 47 (October): 728–744.
- Dutra, Ivan de Souza, Antônio Pedroso and Mauro Guilherme Maidana Capelari (2011). “A Abordagem da Ecologic Organizacional e o Positivismo Lógico: É Possível um Diálogo?” I Colóquio Internacional de Epistemologia e Sociologia de Ciência da Administração, Florianopolis, Brazil, March.

V COLÓQUIO INTERNACIONAL DE EPISTEMOLOGIA E SOCIOLOGIA DA CIÊNCIA DA ADMINISTRAÇÃO

FLORIANÓPOLIS - SC - BRASIL (MARÇO/2015)

- The Economist* (2014). "Blind data: the tricky art of predicting Brazil's election." 4 October, available online, at:
<http://www.economist.com/news/americas/21621853-tricky-art-predicting-brazils-election-blind-data>
- Fairbanks, Kathy. 2010. "Court Orders Changes to Prop. 22 Fiscal Impact Summary." Yes on 22, Digital Collections, UCLA Library, August 9,
http://digital.library.ucla.edu/websites/2010_995_163/node/150/index.htm
(accessed February 27, 2013).
- Farrimond, Hannah R. and Helene Joffe. 2006. "Pollution, Peril and Poverty: A British Study of the Stigmatization of Smokers." *Journal of Community & Applied Social Psychology* 16 (6): 481-491.
- Field, Mervin and Mark DiCamillo. 2010. "Release #2356: State Ballot Propositions: Yes Side Moves Ahead on Prop. 19 (Marijuana Legalization). Plurality Continues to Oppose Prop. 23, to suspend AB32, the Greenhouse Gas Emissions Law. Prop 25, to Allow a Majority Vote to Approve State Budgets, Remains Ahead But Its Lead Has Diminished." Field Research Corporation,
<http://www.field.com/fieldpollonline/subscribers/RIs2356.pdf>, (accessed January 3, 2012).
- Follow the Money. "California 2010: Ballot Measures." *National Institute on Money in State Politics*. <http://www.followthemoney.org/database/StateGlance/state_ballot_measures.phtml?s=CA&y=2010> Accessed July 27, 2011.
- Fontana, Cyndee and Marc Benjamin. 2010. "Wrong proposition wording on Fresno Co. ballots." *Fresno Bee*, <<http://www.fresnobee.com/2010/10/29/2137814/wrong-wording-on-fresno-co-ballots.html>> Accessed July 11, 2011.
- Galvão, Kécia da Silveira, Odilon Saturnino Silva Neto, Josete Florencio dos Santa, and Pierre Lucena Raboni (2014). "Análise dos modelos de precificação de ativos sob uma abordagem epistêmica do positivismo/pós-positivismo e do construtivismo." IV Colóquio Internacional de Epistemologia e Sociologia de Ciência da Administração, Florianópolis, Brazil, March.
- Gardner, Michael. 2010. "Cities, Counties Worry About Funds. Ballot Measure Aims to Block State from Dipping Into Revenues." *San Diego Union-Tribune*, June 20,

V COLÓQUIO INTERNACIONAL DE EPISTEMOLOGIA E SOCIOLOGIA DA CIÊNCIA DA ADMINISTRAÇÃO

FLORIANÓPOLIS - SC - BRASIL (MARÇO/2015)

<http://www.utsandiego.com/news/2010/Jun/20/cities-counties-worry-about-funds/?#article-copy>, (accessed July 17, 2014).

Haider-Markel, Donald P. and Mark R. Joslyn. 2001. "Gun Policy, Opinion, Tragedy, and Blame Attribution: The Conditional Influence of Issue Frames." *Journal of Politics* 63(2): 520-543.

Hajnal, Zoltan, Elisabeth Gerber and Hugh Louch. 2002. "Minorities and Direct Legislation: Evidence from California Ballot Proposition Elections." *Journal of Politics* 64(1): 154-177.

Hamilton, James T. 2004. *All the News That's Fit to Sell: How the Market Transforms Information Into News*. Princeton, N.J.: Princeton University Press.

Hero, Rodney E. and Anne G. Campbell. 1996. "Understanding Latino Political Participation: Exploring Evidence from the Latino National Political Survey." *Hispanic Journal of Behavioral Sciences* 18(2): 129-141.

Johnston, Richard, André Blais, Henry E. Brady, and Jean Crête. 1992. *Letting the People Decide: Dynamics of a Canadian Election*. Stanford, CA: Stanford University Press.

Kahn, Kim Fridkin and Patrick J. Kenney. 1997. "A Model of Candidate Evaluations in Senate Elections: The Impact of Campaign Intensity" *Journal of Politics* 59 (4): 1173-1205.

Kahneman, Daniel. 2003. "A Perspective on Judgment and Choice: Mapping Bounded Rationality." *American Psychologist* 58(9): 697-720.

Kahneman, Daniel and Amos Tversky. 1979. "Prospect Theory: An Analysis of Decision Under Risk." *Econometrica* 47(2): pp. 263-292.

KPMH Channel 26. 2010. "Wrong Language Used for Prop. 23 on Fresno County Ballots." October 29. <http://www.kmph.com/story/13411769/wrong-language-used-for-prop-23-on-fresno-county-ballots> (accessed on February 13, 2014).

League of California Cities. 2010 "League Awaits Lawsuit to Modify Fiscal Impact in Prop. 22 Title & Summary and Ballot Label." *CA Cities Advocate* Issue 31, August 6, 2010.

V COLÓQUIO INTERNACIONAL DE EPISTEMOLOGIA E SOCIOLOGIA DA CIÊNCIA DA ADMINISTRAÇÃO

FLORIANÓPOLIS - SC - BRASIL (MARÇO/2015)

- Lopez, Mark Hugo. 2011. "The Latino Electorate in 2010: More Voters, More Non-Voters." *Pew Research Center*.
- Nelson, Thomas E. and Zoe M. Oxley. 1999. "Issue Framing Effects on Belief Importance and Opinion." *Journal of Politics* 61(04): 1040-1067.
- Nicholson, Stephen P. 2003. "The Political Environment and Ballot Measure Awareness." *American Journal of Politics*. 47 (3): 403-410.
- Parkin, Michael and Frances Zlotnick. 2011. "English Proficiency and Participation in U.S. Elections." *Politics and Policy* 39(4): 515-537.
- Rasinski, Kenneth A. 1989. "The Effect of Question Wording on Public Support for Government Spending." *The Public Opinion Quarterly* 53 (3): 388-394.
- Rogers, Paul. 2010. "Judge rules Proposition 23 ballot language must be reworded." *San Jose Mercury News*, August 3, 2010.
- Rugg, D. 1941. "Experiments in Wording Questions: II." *Public Opinion Quarterly* 5: 91-92.
- Schuman, Howard and Stanley Presser. 1981. *Questions and Answers in Attitude Surveys*. New York: Academic Press, Inc.
- Schwarz, Norbert. 2007. "Attitude Construction: Evaluation in Context." *Social Cognition* 25(5): 638-656.
- Smith, Eric R.A.N. and Richard L. Fox. 2001. "The Electoral Fortunes of Women Candidates for Congress." *Political Research Quarterly* 54: 205-221.
- Smith, Mark A. 2001 "The Contingent Effects of Ballot Initiatives and Candidate Races on Turnout." *American Journal of Political Science*. 45 (3): 700-706.
- Sulkin, Tracy. 2001. "Explaining Campaign Intensity." *American Politics Research* 29: 608-624.
- Tversky, Amos, and Daniel Kahneman. 1981. "The Framing of Decisions and the Psychology of Choice." *Science* 211: 453-458.

V COLÓQUIO INTERNACIONAL DE EPISTEMOLOGIA E SOCIOLOGIA DA CIÊNCIA DA ADMINISTRAÇÃO

FLORIANÓPOLIS - SC - BRASIL (MARÇO/2015)

U.S. Department of Agriculture. Economic Research Service. 2011. *County-Level Unemployment and Median Household Income for California*. Washington, D.C.: Government Printing Office,
<http://www.ers.usda.gov/data/unemployment/RDList2.asp?ST=CA> (July 15, 2012).

U.S. Census Bureau 2014. American Community Survey 5-Year Estimates 2008-2012, Table S1601; generated by Michael Binder; using American FactFinder;
<http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_12_5YR_S1601> (July 15, 2014).

U.S. Census Bureau. 2012. *State & County Quickfacts: California*. Washington, D.C.: U.S. Department of Commerce,
<http://quickfacts.census.gov/qfd/states/06/06019.html> (May 11, 2012).

U.S. Census Bureau. 2013. Bureau of the Census. *State & County Quickfacts: Florida*. Washington, D.C.: U.S. Department of Commerce,
<http://quickfacts.census.gov/qfd/states/12/12031.html> (June 4, 2013).