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The Effect of Signing Ballot Petitions on Turnout

An Honors Thesis submitted in partial fulfillment of the requirements of Honors Studies
in Political Science

By

Samuel Franklin Harper

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Political Science

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Introduction

In the United States, twenty-four states and the Virgin Islands allow for direct democracy in the form of ballot initiatives.¹ Ballot initiatives come in several forms; generally, the ballot initiative process involves groups of citizens signing petitions to introduce a law. If these petitions cross a set threshold, usually established in the state constitution, the initiative is put on the ballot at the next election.² The extent to which ballot initiatives, if approved by voters, can be subsequently modified by the legislatures varies from state to state, but states that restrict legislative reaction to initiatives tend to use initiatives more.³

The adoption of ballot initiatives has traditionally been considered one of the major achievements of the Progressive Era of U.S. politics; most states that adopted ballot initiatives did so between 1898 and 1918.⁴ While the primary goal of the adoption of the ballot initiative was to “control unrepresentative or unresponsive legislatures,”⁵ a

¹ The twenty-four states with ballot initiatives are Alaska, Arizona, Arkansas, California, Colorado, North and South Dakota, Florida, Idaho, Illinois, Maine, Massachusetts, Michigan, Mississippi, Missouri, Montana, Nebraska, Nevada, Ohio, Oklahoma, Oregon, Utah, Washington, and Wyoming. Additionally, two states (Maryland and New Mexico) allow referenda, in which citizens can petition to repeal a law, without allowing for other forms of direct democracy. See Howard R. Ernst, “The Historical Role of Narrow-Minded Interests in Initiative Politics,” in *Dangerous Democracy? The Battle over Ballot Initiatives in America*, eds. Larry J. Sabato, Howard R. Ernst, and Bruce A. Larson (Lanham, Md.: Rowman & Littlefield Publishers, Inc., 2001), 3-4. This situation appears to be unchanged from 2001, see National Conference of State Legislators, “Chart of the Initiative States,” accessed September 17, 2019, <http://www.ncsl.org/research/elections-and-campaigns/chart-of-the-initiative-states.aspx>.

² Daniel A. Smith and Caroline J. Tolbert, *Educated by Initiative: The Effects of Direct Democracy on Citizens and Political Organizations in the American States* (Ann Arbor: University of Michigan Press, 2004), xii.

³ Shaun Bowler and Todd Donovan, “Measuring the Effect of Direct Democracy on State Policy: Not All Initiatives Are Created Equal,” *State Politics and Policy Quarterly* vol. 4, no. 3 (2004): 348-350, accessed October 22, 2019, <https://journals.sagepub.com/doi/pdf/10.1177/153244000400400305>.

⁴ Of the twenty-four ballot initiative states, only four (Alaska, Florida, Wyoming, and Illinois) adopted initiatives after 1918, though Alaska did so at its statehood in 1959. Additionally, Mississippi adopted the ballot initiative in 1915, but was prohibited from using it by its state Supreme Court from 1922 until re-adoption in 1992. See Smith and Tolbert, *Educated by Initiative*, 25.

⁵ Smith and Tolbert, *Educated by Initiative*, 4.

secondary goal of Progressives was to encourage citizen participation in lawmaking.⁶ The measurable means through which Progressives hypothesized initiatives would increase citizen participation are often collectively referred to as the “educative effects” of ballot initiatives.

Several educative effects have been identified, but the focus of this thesis is a single effect: voter turnout. Progressives believed the presence of initiatives would increase voter turnout. Though scholars debate the extent to which initiatives increase turnout and the characteristics of voters who are most likely to turn out to vote, there is generally a consensus that initiatives increase turnout, as Progressives theorized. From this consensus, the paper turns to whether signing a ballot initiative petition, a common means of notifying voters of an initiative’s potential presence, increases turnout. An analysis of petition-signer lists from two Arkansan initiatives, a 2014 minimum-wage initiative and a 2016 medical marijuana initiative, indicates that signing a ballot petition significantly increases the likelihood that the initiative petition signer turns out to vote for the election at which the initiative is placed on the ballot.

Literature Review

The term “educative effects” has been most prominently used by Daniel A. Smith and Caroline J. Tolbert in their 2004 book *Educated by Initiative: The Effects of Direct Democracy on Citizens and Political Organizations in the American States*. Smith and Tolbert argue that ballot initiatives have achieved many of their “educative effects,” but more critical scholars, such as Joshua J. Dyck and Edward L. Lascher, use terms such as

⁶ Smith and Tolbert, *Educated by Initiative*, 8-11. These “educative effects” are discussed in detail later in the thesis.

“secondary effects” and “spillover effects.”⁷ This thesis uses the three terms interchangeably. The number of these educative effects varies. Smith and Tolbert identify civic engagement, and confidence in government, and voter turnout as areas in which the citizenry is educated by ballot initiatives.⁸

“Civic engagement,” as defined by Smith and Tolbert, includes such measurable secondary effects as knowledge of politics, interest in politics, and likelihood to discuss politics. Concerning political knowledge, Smith and Tolbert claimed in 2004 to have found a positive correlation between the number of initiatives on the 1996 presidential election ballot and the ability to answer more than eighty percent of questions asked about politics of the time.⁹ However, Dyck and Lascher claimed Smith and Tolbert’s experiment was “inconclusive;” additionally, Smith and Tolbert found ballot initiatives had no discernable effect on political knowledge in the 1998 or 2000 elections.¹⁰ Other studies claim to have found no statistically significant correlations between the presence of ballot initiatives and increased political knowledge in most elections.¹¹ However, even these studies have cases in which, at a 95 percent confidence interval, the presence of

⁷ See Joshua J. Dyck and Edward L. Lascher, *Initiatives without Engagement: A Realistic Appraisal of Direct Democracy’s Secondary Effects* (Ann Arbor: University of Michigan Press, 2019). For the term “spillover effects,” see Dyck and Lascher, *Initiatives without Engagement*, 3.

⁸ These categories are taken from the titles of the second, third, and fourth chapters of *Educated by Initiative*. See Smith and Tolbert, *Educated by Initiative*, vii.

⁹ Smith and Tolbert did not list what questions were asked in the 1996 election. In the 1998 election, the dataset Smith and Tolbert used included questions like “What position does Al Gore hold?” and “Which party had a majority in the House before the election?” See Smith and Tolbert, *Educated by Initiative*, 59-62.

¹⁰ Dyck and Lascher claim Smith and Tolbert’s study was “inconclusive” because the reported *p*-value was .066, indicating a confidence interval of 93.4 percent. This is less than the traditional confidence interval of 95 percent needed in order to reject the null hypothesis. For detailed results of Smith and Tolbert’s political knowledge analysis, see Smith and Tolbert, *Educated by Initiative*, 153. For Dyck and Lascher’s discussion of Smith and Tolbert’s analysis, see Dyck and Lascher, *Initiatives without Engagement*, 14-15.

¹¹ See Nicholas R. Seabrook, Joshua J. Dyck, and Edward L. Lascher, “Do Ballot Initiatives Increase General Political Knowledge?” *Political Behavior* vol. 37, no. 1 (2015): 279-307, accessed October 8, 2019, www.jstor.org/stable/43653225, and Daniel Schlozman and Ian Yohai, “How Initiatives Don’t Always Make Citizens: Ballot Initiatives in the American States, 1978-2004,” *Political Behavior* vol. 30, no. 4 (2008): 469-489, accessed October 4, 2018, www.jstor.org/stable/40213329.

ballot initiatives was shown to be correlated with an increase in political knowledge.¹² At least one article partially concurs with Smith and Tolbert that ballot initiatives have an effect on voter political knowledge, but that this effect is only statistically significant when measuring voters who have experienced ballot initiatives for twenty years or more.¹³

Another educative effect identified by Smith and Tolbert is “confidence in government,” which has been studied the least of the three categories of educative effects.¹⁴ Confidence in government is usually measured by “external efficacy,” which Smith and Tolbert define as being “when an individual feels that the government is responsive to the individual.”¹⁵ Studies conducted using survey data from elections in the 1980s and 1990s tend to find that the presence of ballot initiatives increases external efficacy.¹⁶ However, Smith and Tolbert hypothesized that California’s growing Hispanic and non-white populations may cause California, the state which most frequently uses ballot initiatives, to no longer demonstrate an increase in external efficacy when ballot initiatives are present, because of a perception that initiatives were “targeting minority

¹² For the 2015 Seabrook, Dyck, and Lascher study, there is one such case: the amount spent on ballot initiative campaigns correlated positively with voter political knowledge in the 2008 presidential election, see Seabrook, Dyck, and Lascher, “Do Ballot Initiatives Increase General Political Knowledge?” 295. Because of the presentation of their data, it is unclear how many elections had a statistically significant impact on political knowledge in the 2008 Schlozman and Yohai study. While it is certain that ballot initiatives had no effect on knowledge of political figures in any election Schlozman and Yohai analyzed, there was definitely a statistically significant correlation between the presence of ballot initiatives and knowledge of party platforms among non-voters in the 1988, 1992, and 1994 elections, and perhaps others. See Schlozman and Yohai, “Initiatives Don’t Always Make Citizens,” 481.

¹³ See Mark A. Smith, “Ballot Initiatives and the Democratic Citizen,” *The Journal of Politics* vol. 64, no. 3 (2002): 892-903, accessed October 8, 2019, www.jstor.org/stable/1520118. For a criticism of Mark Smith’s analysis, see Seabrook, Dyck, and Lascher, “Do Ballot Initiatives Increase General Political Knowledge?” 281. However, Dyck and Lascher accept “Ballot Initiatives and the Democratic Citizen” in *Initiatives without Engagement*, see Dyck and Lascher, *Initiatives without Engagement*, 15.

¹⁴ Dyck and Lascher, *Initiatives without Engagement*, 16.

¹⁵ Smith and Tolbert, *Educated by Initiative*, 73-74.

¹⁶ See Smith and Tolbert, *Educated by Initiative*, 157, and Shaun Bowler and Todd Donovan, “Democracy, Institutions and Attitudes about Citizen Influence on Government,” *British Journal of Political Science* vol. 32, no. 2 (2002): 371-390, accessed October 22, 2019, <http://www.jstor.org/stable/4092223>.

interests.”¹⁷ Indeed, studies of elections in the first decade of the twenty-first century have found no correlation between the presence of ballot initiatives and external efficacy.¹⁸

Voter turnout is perhaps the most studied possible educative effect of ballot initiatives. Modern scholarship on voter turnout seems to have been spurred by a late-1970s push to adopt a national ballot initiative provision. In 1977, James G. Abourezk¹⁹ and Mark O. Hatfield²⁰ introduced a Senate resolution to amend the U.S. Constitution to allow for a national ballot initiative.²¹ In the hearings on this resolution, there was no discussion of any effect ballot initiatives could have on voter turnout. However, a paper placed in the official record of the hearing testimony did report on how initiative turnout compared to turnout for political office elections, finding the initiatives generally performed better than elections to offices that were not the presidency.²²

¹⁷ Smith and Tolbert, *Educated by Initiative*, 79. Smith and Tolbert had found a significant negative correlation between being Asian- or African-American and external efficacy, but found no significant correlation, positive or negative, between being Latino and external efficacy. See Smith and Tolbert, *Educated by Initiative*, 157.

¹⁸ See Schlozman and Yohai, “Initiatives Don’t Always Make Citizens,” 482, and Joshua J. Dyck and Edward L. Lascher, “Direct Democracy and Political Efficacy Reconsidered,” *Political Behavior* vol. 31, no. 3 (2009): 401-427, accessed October 22, 2019, <https://www.jstor.org/stable/40587291>.

¹⁹ Abourezk, a Democrat, was the junior U.S. senator from South Dakota from 1973 to 1979.

²⁰ Hatfield, a Republican, was a U.S. senator from Oregon from 1967 to 1997 and the senior senator from Oregon from 1969.

²¹ *Hearings before the Subcommittee on the Constitution of the Committee on the Judiciary of the United States Senate: Ninety-Fifth Congress, First Session, on S.J. Res. 67, Joint Resolution Proposing an Amendment to the Constitution of the United States with Respect to the Proposal and the Enactment of Laws by Popular Vote of the People of the United States* (1977), 9. Two corresponding resolutions were introduced into the House of Representatives. The first was by Guy Vander Jagt, the Republican congressman from Michigan’s ninth district from 1966 to 1993; the second was by William J. Hughes (the Democratic congressman from New Jersey’s second district from 1975 to 1995), James R. Jones (the Democratic congressman from Oklahoma’s first district from 1973 to 1987), Frederick W. Richmond (the Democratic congressman from New York’s fourteenth district from 1975 to 1982), Harold S. Sawyer (the Republican congressman from Michigan’s fifth district from 1977 to 1985), and Walter E. Fauntroy (the Democratic delegate from the District of Columbia from 1971 to 1991). See S.J. Res. 67 Hearings, 24-30.

²² S.J. Res. 67 Hearings, 254.

Spurred by a desire to definitely determine whether ballot initiatives increased turnout for all elections,²³ scholars began publishing studies on the relationship between ballot initiatives and voter turnout in the early 1980s. Initial studies found that, when comparing all states with ballot initiatives to all states without ballot initiatives, turnout was occasionally higher in states with ballot initiatives, usually in midterm elections. However, even when turnout was greater in initiative states than in non-initiative states, that turnout increase could usually be attributed to the fact that southern states typically lack ballot initiatives and have lower turnout than non-southern states.²⁴ These analyses limited the relationship between ballot initiatives and voter turnout to being merely a dichotomous variable; variations in the number, type, or location of the ballot initiatives were not accounted for. More recent scholarship has found many ways to measure the effect ballot initiatives might have on voter turnout.

The most obvious variation in states' use of ballot initiatives is the number of initiatives that appear on the ballot at each election in each state. A 2001 study by Caroline J. Tolbert, John A. Grummel, and Daniel A. Smith found a positive linear correlation between the number of ballot initiatives in an election and voter turnout.²⁵ Later studies found that this relationship exists regardless of whether southern states are

²³ David H. Everson, "The Effects of Initiatives on Voter Turnout: A Comparative State Analysis," *The Western Political Quarterly* vol. 34, no. 3 (1981): 415, accessed October 3, 2018, <https://www.jstor.org/stable/447220/>.

²⁴ Everson, "Effects of Initiatives," 421-422, and Thomas E. Cronin, *Direct Democracy: The Politics of Initiative, Referendum, and Recall* (Cambridge, Mass.: Harvard University Press, 1989), 227.

²⁵ Caroline J. Tolbert, John A. Grummel, and Daniel A. Smith, "The Effects of Ballot Initiatives on Voter Turnout in the American States," *American Politics Research* vol. 29, no. 6 (2001): 636, accessed October 3, 2018, <https://doi.org/10.1177/1532673X01029006005>.

included,²⁶ and when either voter-eligible population or voter-age population is used to measure turnout.²⁷

In the same year Tolbert, Grummel, and Daniel Smith released their study on the number of initiatives at the ballot, Mark A. Smith proposed another potential cause of higher voter turnout: salience. Using the number of ballot-initiative headlines on the front pages of morning-after-election-day newspapers as a measure of salience, Mark Smith found a strong positive linear correlation between the initiatives' salience and voter turnout in midterm elections.²⁸ These findings have been corroborated with American National Election Studies (A.N.E.S.) polling data.²⁹

Salience studies generally show a stronger impact on voter turnout in midterm elections than initiative-number studies. Further research into the combined impact of these variables has shown that the number of initiatives likely does not affect turnout when salience is also considered.³⁰ Daniel R. Biggers has found that this effect exists regardless of the type of election: midterm, presidential, off-year and special elections at both the statewide and municipal levels.³¹ Additionally, Biggers finds that “moral issues” are consistently the most salient ballot initiatives issues. These moral issues include, but

²⁶ Smith and Tolbert, *Educated by Initiative*, 41-43.

²⁷ Smith and Tolbert found that using voter-eligible population in place of voter-age population in measuring turnout increases the expected turnout increase by between 0.2% and 2.7%. See Caroline J. Tolbert and Daniel A. Smith, “The Educative Effects of Ballot Initiatives on Voter Turnout,” *American Politics Research* vol. 33 no. 2 (2005): 298-301, and Smith and Tolbert, *Educated by Initiative*, 41-43.

²⁸ Mark A. Smith, “The Contingent Effects of Ballot Initiatives and Candidate Races on Turnout,” *American Journal of Political Science* vol. 45, no. 3 (2001): 704, accessed October 31, 2019, <https://www.jstor.org/stable/2669246>.

²⁹ Robert J. Lacey, “The Electoral Allure of Direct Democracy: The Effect of Initiative Salience on Voting, 1990-96,” *State Politics and Policy Quarterly* vol. 5, no. 2 (2005): 174, accessed October 31, 2019, <https://doi.org/10.1177/153244000500500204>.

³⁰ See Daniel R. Biggers, “When Ballot Issues Matter: Social Issue Ballot Measures and Their Impact on Turnout,” *Political Behavior* vol. 33, no. 1 (2011): 3-25, accessed November 5, 2019, <https://www.jstor.org/stable/41488272>.

³¹ See Daniel R. Biggers, *Morality at the Ballot: Direct Democracy and Political Engagement in the United States* (Cambridge, England: Cambridge University Press, 2014).

are not limited to, initiatives concerning L.G.B.T. rights, marijuana, abortion, the death penalty, euthanasia, obscenity, and stem-cell research.³²

Given that moral issues have been shown to increase voter turnout, some people, scholars and laymen alike, have hypothesized that ballot initiatives could increase turnout for members and sympathizers of one political party more than another political party. The presence of initiatives seeking to ban same-sex marriage was popularly cited as a reason for perceived increased Republican turnout in the 2004 presidential election, in which Republican George W. Bush was re-elected, as were marijuana-legalization initiatives cited as a reason for perceived increased turnout among Democrats in the 2012 presidential election, in which Democrat Barack Obama was re-elected.³³ However, Biggers found no evidence that the presence of partisan, moral-issue ballot initiatives increased turnout for one party more than another for any election from 2006 to 2010,³⁴ nor were there marked turnout increases among voters generally perceived as being concerned with moral issues, such as evangelical, poorer, or older voters.³⁵ While Biggers was unable to study the 2004 election due to a lack of reliable, nationwide polling data,³⁶ other studies of the 2004 presidential election have found ballot initiatives to have had no more effect on Republican turnout than Democratic turnout.³⁷

³² Biggers, *Morality at the Ballot*, 101.

³³ See Biggers, *Morality at the Ballot*, 1; Schlozman and Yohai, "Initiatives Don't Always Make Citizens," 475-476; and Jay Barth and Janine Parry, "Arkansas: Still Swingin' in 2004," in *Readings in Arkansas Politics and Government*, eds. Janine A. Parry and Richard P. Wang (Fayetteville: University of Arkansas Press, 2009), 361-383.

³⁴ Biggers, *Morality at the Ballot*, 160.

³⁵ Biggers, *Morality at the Ballot*, 161-165.

³⁶ Biggers, *Morality at the Ballot*, 158.

³⁷ See Daniel A. Smith, Matthew DeSantis, and Jason Kassel, "Same-Sex Marriage Ballot Measures and the 2004 Presidential Election," *State and Local Government Review* vol. 38, no. 2 (2006): 78-91, accessed November 12, 2019, <https://doi.org/10.1177/0160322X0603800202>, and D. Sunshine Hillygus and Todd G. Shields, "Moral Issues and Voter Decision Making in the 2004 Presidential Election," *PS: Political Science & Politics* vol. 38, no. 2 (2005): 201-209, accessed November 12, 2019, <https://doi.org/10.1017/S1049096505056301>. While these studies find that national Republican turnout was

Although ballot initiatives have not been found to increase turnout for one party more than another, studies have found that ballot initiatives increase turnout among partisans, as opposed to politically independent voters. A 2010 study by Joshua J. Dyck and Nicholas R. Seabrook found that independent voters were not only not encouraged to turn out by ballot initiatives, but that those voters' likelihood of voting actually *decreased* the more that they were exposed to partisans.³⁸ This 2010 study was confined to California and one county, Multnomah, in Oregon, and only considered turnout effects in special elections from 2003 to 2005.³⁹ However, Joshua Dyck and Edward L. Lascher followed Dyck and Seabrook's 2010 study up with a 2019 national study that used exit poll data; this study confirmed Dyck and Seabrook's earlier finding that ballot initiatives only increase turnout among partisan voters.⁴⁰

With ample studies indicating that ballot initiatives affect voter turnout, a question arises: how are ballot initiatives able to affect voter turnout? A 2009 study by Caroline J. Tolbert, Daniel C. Bowen, and Todd Donovan found a modest positive linear correlation between initiative campaign activity and voter turnout.⁴¹ While ballot initiative campaigns offer the same means to contact voters as other campaigns (e.g. advertisements, rallies, etc.), a necessary point of contact with voters for initiative campaigns are the petitions through which initiatives are placed on the ballot.

likely not increased more than Democratic turnout by same-sex marriage initiatives, the initiatives may have had an effect in some states, or at least Arkansas. See Barth and Parry, "Arkansas: Still Swingin'."

³⁸ Joshua J. Dyck and Nicholas R. Seabrook, "Mobilized by Direct Democracy: Short-Term Versus Long-Term Effects and the Geography of Turnout in Ballot Measure Elections," *Social Science Quarterly* vol. 91, no. 1 (2010): 199-204, accessed August 12, 2019, <https://doi.org/10.1111/j.1540-6237.2010.00688.x>.

³⁹ Dyck and Seabrook, "Mobilized by Direct Democracy," 196-201.

⁴⁰ Dyck and Lascher, *Initiatives without Engagement*, 93.

⁴¹ Caroline J. Tolbert, Daniel C. Bowen, and Todd Donovan, "Initiative Campaigns: Direct Democracy and Voter Mobilization," *American Politics Research* vol. 37, no. 1 (2009): 179, accessed November 5, 2019, <https://www.doi.org/10.1177/153673X08320185>.

The research on the effect of signing petitions on voter turnout is somewhat sparse, as the petition signatures themselves are rarely made publicly available. In a 2014 paper, Frederick J. Boehmke and R. Michael Alvarez bypassed petition-data sparsity by analyzing the number of petition signatures in each county, which was publicly available. Boehmke and Alvarez found a positive linear correlation between petition signatures per capita per county and voter turnout per county in California elections from 2000 to 2003.⁴² However, Californian counties vary in population from almost ten million (Los Angeles) to just over one thousand (Alpine).⁴³

A 2012 study by Janine A. Parry, Daniel A. Smith, and Shayne Henry also found a positive linear correlation between signing a ballot petition and turning out to vote. Parry, Smith, and Henry were able to use petition signatures, unlike Boehmke and Alvarez, but were only able to use a whole petition signature list for one initiative campaign: a 2009 Gainesville, Florida, municipal election petition to extend antidiscrimination protections to transgender people. For the two statewide elections Parry, Smith, and Henry studied (2008 anti-gay measures in Arkansas and Florida), they were only able to use a random sample of 1,000 potential voters, leading to rather small *n*-values.⁴⁴

⁴² Frederick J. Boehmke and R. Michael Alvarez, "The Influence of Initiative Signature-Gathering Campaigns on Political Participation," *Social Science Quarterly* vol. 95, no. 1 (2014): 172-177, accessed October 3, 2018, <https://www.doi.org/10.1111/ssqu.12053>.

⁴³ To be exact, Los Angeles County had a 2000 census population of 9,519,338, while Alpine County had a 2000 census population of 1,208; Los Angeles County was 7,880 times as large as Alpine County at the 2000 census. See United States Census Bureau, "Gazetteer Files" (2000), last modified June 29, 2018, <https://census.gov/content/census/en/geographies/reference-files/2000/geo/gazetter-file.html>.

⁴⁴ Janine A. Parry, Daniel A. Smith, and Shayne Henry, "The Impact of Petition Signing on Voter Turnout," *Political Behavior* vol. 34, no. 1 (2012): 117-136, accessed October 2, 2018, <https://www.jstor.org/stable/41488054>.

Data and Methods

Arkansas adopted the initiative in 1910 and remains one of the few southern states to have adopted the typically western measure. Through 2012, Arkansas ranked seventh in both total number of initiatives in its history, 123, and average number of initiatives per election, 2.4.⁴⁵ This places Arkansas in the top third of the twenty-four initiative states by use. Here, I examine two Arkansas ballot initiative petitions whose lists were provided by David A. Couch. Couch wrote the 2014 Arkansas minimum wage increase initiative and the 2016 Arkansas medical marijuana legalization initiative and organized those initiatives' petition-signature campaigns.⁴⁶

The official short title of the 2014 minimum-wage initiative was “An Act to Increase the Arkansas Minimum Wage,” and was referred to as “Issue Number 5” on the 2014 Arkansan general election ballot. The initiative was an initiated statute, meaning it would not be incorporated into the state constitution but would trump previous and subsequent acts of the Arkansas General Assembly unless both houses of the General Assembly were to pass an overriding measure with a two-thirds supermajority.⁴⁷ The initiative sought to gradually increase the state's minimum wage from \$6.25 an hour to \$8.50 an hour by 2017.⁴⁸ This initiative passed with broad support from across the state; sixty-six percent of voters approved the initiative, and it received a majority of the vote

⁴⁵ Todd Donovan, Daniel A. Smith, Tracy Osborn, and Christopher Z. Mooney, *State and Local Politics: Institutions and Reform*, Fourth edition (Stamford, Conn.: Cengage Learning, 2015), 119.

⁴⁶ Olivia Paschal, “How to Change Policy Without Politicians,” *The Atlantic*, May 18, 2019, accessed December 2, 2019, <https://www.theatlantic.com/politics/archive/2019/05/arkansas-direct-democracy-ballot-measures/589513/>.

⁴⁷ Constitution of the State of Arkansas, accessed March 17, 2020, Lexis Nexis (login available through <https://www.arkleg.state.ar.us/>), article 5, section 1.

⁴⁸ University of Arkansas Division of Agriculture Public Policy Center, “An Act to Increase the Arkansas Minimum Wage,” University of Arkansas Cooperative Extension Service, accessed December 2, 2019, <https://www.uaex.edu/business-communities/voter-education/FSPPC316MinimumWage.pdf>.

in every county in Arkansas.⁴⁹ The 2014 initiative has since been superseded by a 2018 initiative.⁵⁰

The official short title of the 2016 marijuana initiative was “The Arkansas Medical Marijuana Amendment of 2016,” and was referred to as “Issue Number 6” on the 2016 Arkansas general election ballot. Unlike the 2014 minimum-wage initiative, the 2016 marijuana initiative was a proposed constitutional amendment. The initiative sought to legalize the medical use of cannabis in the State of Arkansas within the regulatory framework of a newly-established Medical Marijuana Commission.⁵¹ While the 2014 minimum-wage initiative passed with broad support, the 2016 marijuana initiative was more controversial within the state. The initiative was approved by fifty-three percent of voters at the 2016 Arkansas general election, but only reached a majority in thirty-eight of Arkansas’s seventy-five counties, just over half.⁵²

The dichotomous, dependent variable for this thesis is whether a voter turned out to vote in the election. The Arkansas voter registration file, hereafter referred to as the

⁴⁹ Mark Martin, Arkansas Secretary of State (2011-19), “November 4, 2014 Arkansas General Election and Nonpartisan Runoff Election,” Clarity Elections, last modified December 11, 2014, <https://results.enr.clarityelections.com/AR/53237/149792/Web01/en/summary.html>.

⁵⁰ The 2018 minimum-wage initiative, also Issue 5 of its election year, will raise the Arkansas minimum wage to eleven dollars an hour by January 1, 2021. It passed with a margin slightly larger than the 2014 initiative, sixty-eight percent to thirty-two percent. It also reached a majority in all seventy-five counties. See Mark Martin, Arkansas Secretary of State (2011-19), “2018 General Election and Nonpartisan Judicial Runoff,” Clarity Elections, last modified June 6, 2019, <https://results.enr.clarityelections.com/AR/92174/Web02-state.216038/#/>.

⁵¹ University of Arkansas Division of Agriculture Public Policy Center, “Medical Marijuana Amendment,” University of Arkansas Cooperative Extension Service, accessed December 3, 2019, <https://www.uaex.edu/business-communities/voter-education/Issue6.pdf>.

⁵² The thirty-seven counties in which the initiative did not reach a majority are Arkansas, Ashley, Baxter, Bradley, Boone, Cleburne, Cleveland, Columbia, Cross, Dallas, Drew, Franklin, Fulton, Grant, Greene, Hempstead, Howard, Independence, Lafayette, Lawrence, Lincoln, Montgomery, Newton, Pike, Poinsett, Polk, Pope, Prairie, Randolph, St. Francis, Scott, Searcy, Sevier, Sharp, Stone, Union, and White Counties. All of these counties excluding one, St. Francis, were won by Donald J. Trump in the 2016 U.S. presidential general election, see Mark Martin, Arkansas Secretary of State (2011-19), “2016 General Election and Nonpartisan Runoff Election,” Clarity Elections, last modified February 8, 2017, <https://results.enr.clarityelections.com/AR/63912/184685/Web01/en/summary.html>.

“voter registry,” provides this information for both the 2014 and 2016 elections. This voter registry was provided by the Arkansas Secretary of State’s office in February of 2018. The registry also contains voters’ birthdates, addresses, registered party affiliation and the primary and general elections in which they have participated since 2008. These data allow age and prior election history to be identified.

Perhaps the most important potential intervening variable is prior election history. Past studies have found that the turnout increase among irregular voters contacted by get-out-the-vote campaigns is nearly twice the increase for regular voters contact by get-out-the-vote campaigns. In 2002 and 2004, David Niven divided voters into three groups: “consistent,” “irregular,” and “seldom.”⁵³ “Consistent” voters had voted in three of three prior elections, “irregular” voters had participated in one or two, and “seldom” voters had participated in none of the three prior elections.⁵⁴ In 2012, Parry et al. divided voters into four categories: “functionally inactive voters,” “occasional voters,” “regular voters,” and “super voters.” “Super voters” are equivalent to Niven’s “consistent” voters, and “functionally inactive voters” are equivalent to Niven’s “seldom” voters. In the 2012 paper, Niven’s “irregular” voters are divided into two categories: “regular voters,” participating in two of the three prior elections, and “occasional voters,” participating in one of the three prior elections.⁵⁵

⁵³ David Niven, “The Mobilization Calendar: The Time-Dependent Effects of Personal Contact on Turnout,” *American Politics Research* vol. 30, no. 3 (2002): 307-322, accessed December 10, 2019, <https://journals.sagepub.com/doi/pdf/10.1177/1532673X02030003005>, and David Niven, “The Mobilization Solution? Face-to-Face Contact and Voter Turnout in a Municipal Election,” *The Journal of Politics* vol. 66, no. 3 (2004): 868-884, accessed December 11, 2019, <https://www.jstor.org/stable/10.1111/j.1468-2508.2004.00280.x>.

⁵⁴ Niven, “The Mobilization Solution?” 875.

⁵⁵ Parry et al., “Impact of Petition Signing,” 130.

For the sake of comparability with the study most closely resembling this study, the 2012 Parry et al. article, this analysis uses the same categories. These categories are delineated based on participation in the three biennial, general elections prior to the election in which the initiative occurred. For the 2014 initiative, these are the 2008, 2010, and 2012 general elections; for the 2016 initiative, these are the 2010, 2012, and 2014 general elections. Assignment of voters to each category for each initiative is determined by how many of these three elections a voter participated in: “functionally inactive voters” participated in none of the elections, “occasional voters” participated in one, “regular voters” participated in two, and “super voters” participated in all three. When performing the regression analyses, these categories are treated as a single variable, “vote history,” with numerical values corresponding to the number of elections participated in (i.e., 0, 1, 2, 3), making “vote history” a discrete variable.

Most past studies of elections have been able to control for race, gender, and partisanship. Unfortunately, none of these three variables are identifiable for this thesis. Neither gender nor race is listed in the Arkansas voter registry. Gender was identifiable in the 2012 Parry et al. study.⁵⁶ However, in that paper the researchers coded each voter’s gender manually, a benefit of the study’s *n*-value of 1,000 for the Arkansan data. For this thesis, manually coding the gender of each of Arkansas’s 1.7 million registered voters was not feasible.

Race is not reported to the Arkansas Secretary of State’s office because Arkansas is not a covered jurisdiction of the Voting Rights Act of 1965. Race could be inferred from precinct- or county-level census data but assigning a racial variable to individuals

⁵⁶ Parry, Smith, and Henry, “Impact of Petition Signing,” 128.

would be committing an ecological fallacy; for example, a white person living in a ninety-percent-black precinct is not himself ninety-percent black. The 2012 Parry et al. paper identified race in Florida, a V.R.A.-covered jurisdiction, but not Arkansas.⁵⁷

Though registered party affiliation is listed in the Arkansas voter registry, party registration is a poor indicator of partisanship in Arkansas. Almost ninety percent of Arkansan voters are not registered with a political party, as shown in Table 1.

<i>Party</i>	<i>Registered members</i>	<i>Percentage</i>
Republican Party	95,317	5.322%
Democratic Party	84,698	4.729%
Libertarian Party	418	0.023%
Green Party	56	0.003%
No registered party affiliation	1,610,643	89.923%
<i>Total</i>	<i>1,791,132</i>	<i>100%</i>

As table 2 shows, polling data from the same year the registry was acquired do not indicate that ninety percent of Arkansans consider themselves politically independent.

<i>Party</i>	<i>Percentage of voters identifying with party</i>	<i>Percentage of voters registered with party</i>
Republican Party	34%	5.32%
Democratic Party	27%	4.73%
Other party affiliation	6%	0.03%
No party affiliation	32%	89.92%
Source for party identification: Janine A. Parry, Director, "The Arkansas Poll, 2018: Summary Report," University of Arkansas, accessed December 3, 2019, https://fulbright.uark.edu/departments/political-science/partners/arkpoll/2018-summary-report.pdf .		

Past participation in party primaries was also considered as an independent variable to determine partisanship. However, that measure has an intrinsic problem:

⁵⁷ Parry, Smith, and Henry, "Impact of Petition Signing," 128.

partisanship could only be assigned to those voters who participated in the primary election. For both the 2014 and 2016 elections, participation in the party primary strongly correlates with participation in the general election, even when controlling for age, prior vote history, and whether the voter had signed a ballot petition.

Findings

Tables 3 and 4 display the turnout per voter category for the 2014 minimum-wage initiative and the 2016 marijuana initiative, respectively.

Voter category	Functionally inactive voters	Occasional voters	Regular voters	Super voters
Signed petition	2,904/19,625 (14.8%)	4,357/10,418 (41.8%)	6,614/11,110 (59.5%)	18,938/21,304 (88.9%)
Did not sign petition	63,291/577,615 (11.0%)	89,945/246,564 (36.5%)	144,160/257,780 (55.9%)	470,471/544,610 (86.4%)
Difference in turnout	3.8%	5.3%	3.6%	2.5%

Voter category	Functionally inactive voters	Occasional voters	Regular voters	Super voters
Signed petition	9,988/21,937 (45.5%)	10,424/14,715 (70.8%)	11,857/13,599 (87.2%)	19,394/20,174 (96.1%)
Did not sign petition	200,283/622,971 (32.1%)	162,294/273,491 (59.3%)	212,149/269,388 (78.8%)	477,446/507,694 (94.0%)
Difference in turnout	13.4%	11.5%	8.4%	2.1%

The act of signing the initiative petition appears to have increased turnout in both elections. Table 3 indicates that signing the petition for the relatively uncontroversial 2014 minimum-wage initiative resulted in between three and six percent more less-than-super voters turning out in that election. Table 4 indicates a much stronger effect for the more controversial 2016 medical marijuana initiative; the act of signing the marijuana

petition seems to have increased turnout by between eight and sixteen percent among less-than-super voters.

Variable	2014 Arkansas minimum-wage initiative			2016 Arkansas medical marijuana initiative		
	Coefficient	Std. error	<i>p</i> -value	Coefficient	Std. error	<i>p</i> -value
Signed petition	0.289	0.010	.000	0.542	0.010	.000
Vote history	1.179	0.002	.000	1.130	0.002	.000
Age	0.014	0.000	.000	-0.001	0.000	.000
Constant	-2.601	0.006	.000	-0.713	0.005	.000
<i>n</i>	1,689,026			1,743,969		

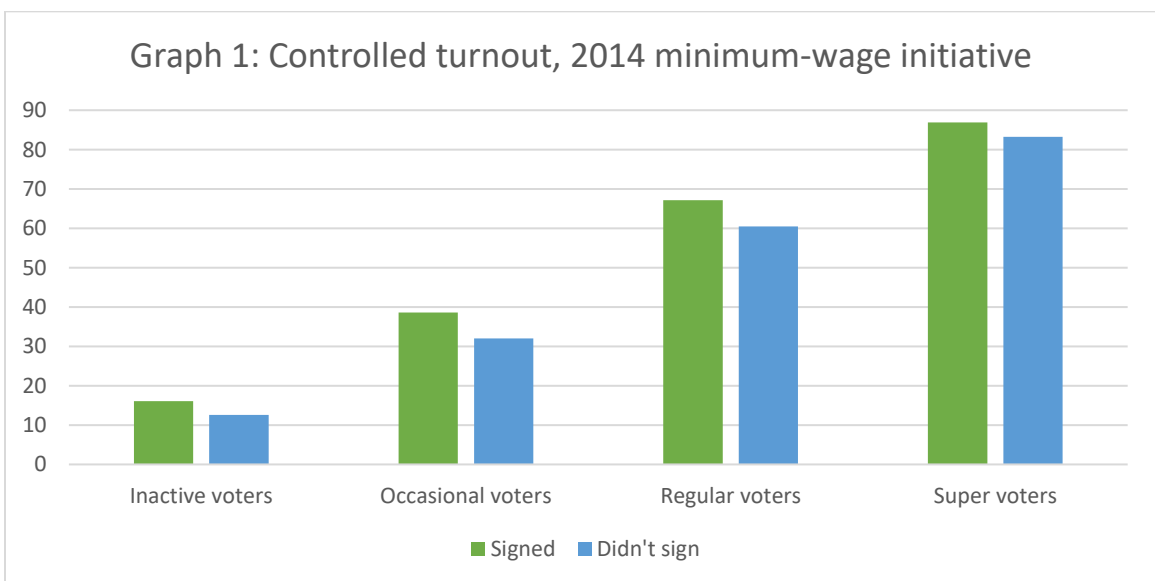
These regressions support the findings in Tables 3 and 4: signing a petition has a slightly significant impact on the likelihood a voter turns out, with the stronger effect occurring with the more controversial medical marijuana initiative. Additionally, the outputs of these regressions can be used to estimate the effect that signing a petition had on the probability that a hypothetical average voter would turn out to vote, where the average age of a registered voter in 2014 is between forty-seven and forty-eight years old, and the average age of a registered voter in 2016 is between forty-eight and forty-nine years old.⁵⁸ These controlled turnouts are displayed in tables 6 and 7:

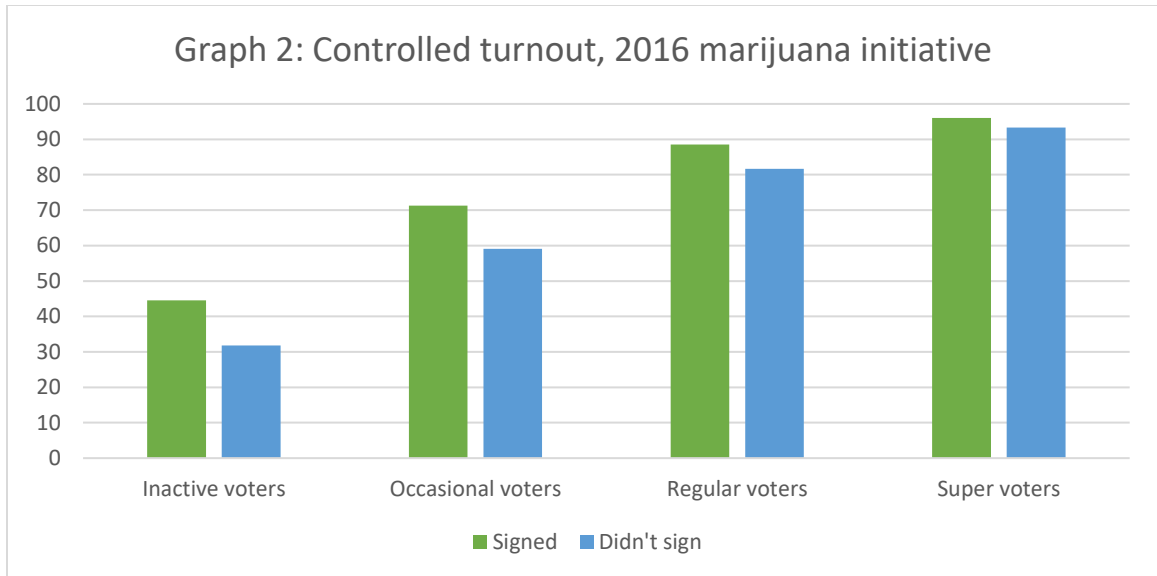
Voter category	Functionally inactive voters	Occasional voters	Regular voters	Super voters
Signed petition	16.1%	38.6%	67.1%	86.9%
Did not sign petition	12.6%	32.0%	60.5%	83.2%
Difference in predicted turnout	3.5%	6.6%	6.6%	3.7%

⁵⁸ Rounded to three digits after the decimal place, the exact average ages are 47.674 for the 2014 initiative, and 48.717 for the 2016 initiative.

Voter category	Functionally inactive voters	Occasional voters	Regular voters	Super voters
Signed petition	44.5%	71.3%	88.5%	96.0%
Did not sign petition	31.8%	59.1%	81.7%	93.3%
Difference in predicted turnout	12.7%	12.2%	6.8%	2.7%

These controlled turnouts for a hypothetical average voter further verify the raw turnouts displayed in tables 3 and 4. As shown in table 6, signing the minimum-wage petition appears to have had the strongest effect on occasional and regular voters, while table 7 indicates that the signing the medical marijuana petition was most effective for functionally inactive and occasional voters. Finally, these data are visualized in graphs 1 and 2, which compare the controlled turnouts from tables 6 and 7 among petition-signers with the turnouts from those tables among petition non-signers.





Conclusion

Because of Progressive reformers a century ago, nearly half of these United States allow citizens to directly propose and vote on state laws. The ballot initiative came with a promise to educate the citizenry it empowered. That promise was quite broad, potentially including everything from increasing citizens' knowledge of public officials to increasing a citizen's likelihood to turn out to vote.

A plethora of scholarship, with some dissent, indicates that ballot initiatives increase the likelihood that a voter will turn out to vote. But, the question of how initiatives encourage voters to turn out is not yet well understood. Since the ballot initiative process requires substantial portions of the electorate to sign a ballot petition, likely including citizens who rarely or never vote, it seems likely that signing a ballot initiative petition increases voters' awareness that issues salient to them are potentially going to be voted on.

Two initiatives in Arkansas, one of the most prolific users of the initiative, indicate that signing a ballot initiative petition substantially increases the chance that

citizens will vote. In the 2014 minimum-wage initiative, signing the relatively uncontroversial midterm-year petition most strongly encouraged turnout for voters who had participated in one or two, but not three, of three past election. In the 2016 medical marijuana initiative, signing the significantly more controversial presidential-year petition had an unexpectedly strong effect on nearly all categories of voters, with the effect being the strongest for voters who had not participated in a recent election.

More research needs to be done into the effect that signing petitions has on turnout and the kinds of voters that initiatives effect. Based on the results in this thesis, some initiatives appear to effect turnout differently from others. Future studies should determine whether this effect is because of its salience, controversiality, or because the predictable effect initiatives have on turnout differs between midterm and presidential elections. Though other analyses show the signature-turnout effect also exists in California and Florida, there remain twenty-one ballot initiative states for which the connection between signing petitions and voter turnout is yet to be studied. But given Arkansas's frequent use of the initiative, it is safe to say that a voter who signs a ballot initiative petition is significantly more likely to turn out to vote.

Appendix

Variable	Type	Mean	Std. dev.	Minimum	Maximum
Signed petition	Binary, independent	0.037	0.189	0	1
Vote history	Categorical, independent	1.476	1.275	0	3
Age	Continuous, independent	47.674	18.010	18.000	114.841
Voted	Binary, dependent	0.474	0.499	0	1

Variable	Type	Mean	Std. Dev.	Minimum	Maximum
Signed petition	Binary, independent	0.040	0.197	0	1
Vote history	Categorical, independent	1.398	1.259	0	3
Age	Continuous, independent	48.717	18.516	18.000	116.850
Voted	Binary, dependent	0.633	0.482	0	1

	Actual negative	Actual positive
Predicted negative	True negative: 693,665	False negative: 160,468
Predicted positive	False positive: 194,681	True positive: 640,212
Accuracy of model	79.0%	

	Actual negative	Actual positive
Predicted negative	True negative: 434,637	False negative: 210,271
Predicted positive	False positive: 205,497	True positive: 893,564
Accuracy of model	76.2%	

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