

Why do people vote? The case for Political Efficacy

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Chapter 1: Introduction

Why do some people feel more politically empowered than others? What factors cause people's sense of empowerment to increase or decrease? Political efficacy, or the feeling that an individual can influence the political process, has been a longstanding subject of interest in political psychology. Questions attempting to measure political efficacy have appeared in the American National Election Study survey every presidential election year since 1952, although the questions themselves have changed dramatically. Despite extensive research and interest, however, scholars still have an imprecise sense of how people become politically empowered.

The seminal work of Robert Lane (1959) showed that political efficacy has two dimensions: internal and external. Internal efficacy is the perception that an individual has the skills and understanding required to influence the political system. External efficacy is the perception that institutions and government officials are responsive to individual effort. Both dimensions are useful in explaining patterns of political participation, but internal efficacy is largely assumed to stay static across elections, as it depends more on an individual's self-evaluation, while external efficacy most likely evolves as people's experience with political institutions changes.

Political efficacy is related to the basic American belief in the power of elections. Rational choice theorists have often questioned why people vote if in any given election the probability of affecting an election with a single vote is infinitesimal. Considering that voting has real time and information costs, and no tangible benefits, widespread voting has been seen as a counterargument to the rational voter theory (Ferejohn and Fiorina, 1974). Similarly, if people vote once and observe that their vote made no difference, why would they vote again?

Efficacy has the potential to fill in the gap of the rational choice model: if voting increases people's sense of empowerment, this may be why voting is self-perpetuating. This hypothesis supports a model similar to the one proposed by Bendor, Diermeier, and Ting (2003). Their model seeks to bridge the gap between rational choice theory and the empirical evidence that people frequently vote. They suggest a model of "adaptive rationality", where people repeat satisfactory actions and avoid unsatisfactory ones. However, the model does not suggest any actual actions that may be correlated with future voting: people simply try out voting, and

if they like it, they stay. The difference between people in the BDT model is only an individual's taste for voting.

This paper proposes that efficacy is the foundation behind the Bendor, Diermeier, and Ting model. Satisfactory actions, like voting for the winning candidate or maybe simply voting, increases efficacy. In turn, high levels of efficacy lead to turnout in the future. Some people may indeed have an increased taste for voting than other people. Empirically, this can be tested by seeing if efficacy increases more for some voters than other voters, holding constant other actions like voting for the winner. On the other hand, it could be that voting the winner or preferring the winning candidate are the sources for increases in efficacy. Regardless of either of these two findings, efficacy may be the empirical link underlining adaptive rationality that explains high levels of turnout.

This paper will test six different hypotheses:

1) The act of voting increases external or internal efficacy. People who vote in elections are probably already more efficacious than nonvoters—if they feel like the role of an individual is more likely to change the political system, they are more likely to vote. However, voting may increase their efficacy still more, as they have to justify their actions after their vote. Voting is a tangible action that requires cognitive harmony, so after people vote they may rationalize their behavior and become more efficacious. Like most of the hypotheses tested in this paper, for the reasons explained above voting probably increases external efficacy more than internal efficacy.

2) Only people who vote for the winning candidate increase in efficacy. People vote for the winning candidate could feel that the political system is responsive to their concerns. Also, an increase in efficacy could be centered on the specific candidate: now the political institutions are run by their favored candidate. If they thought an individual had little input in the old government, maybe the new guy will pay more attention. A third theoretical basis for the relationship between winning and efficacy is that it is not the winners who increase in efficacy but the losers who become cynical and disappointed and no longer believe their actions can shape government.

3) People increase in efficacy if they support the winning candidate, even if they do not vote (or decrease in efficacy if they favored the loser). Similar to hypothesis 2, winners may be more responsive to groups that gave them support, increasing the efficacy of people in those groups. Also, people could rationalize that even if they did not vote, the fact that their candidate won is proof that individuals do matter in politics.

4) Internal efficacy is more stable than external efficacy. This hypothesis is frequently supported in the literature, but is often backed up by erroneous coding of questions measuring each construct, as explained in Chapter 2. I will test this hypothesis by seeing if internal efficacy seems more stable from the pre-election to the post-election survey with the new codings proposed by this paper.

5) People with more civic duty should have no change in efficacy, whether or not they voted for the winners. These people went to the polls to satisfy a civic

duty, and so might not need the rationalization of an increase in efficacy. On the other hand, as civic duty is a good predictor of efficacy, people may feel increased feelings of civic duty after voting.

6) People who volunteer on campaigns will increase in efficacy after an election. Individuals who participate in campaigns do so in spite of even greater costs than voting, and so should have greater feelings of efficacy.

7) The more optimistic a person's economic views, the more likely they will have a positive change in efficacy after an election. Optimism about the economy is correlated with efficacy and people who are efficacious are probably more likely to have optimistic views in general. Also, if efficacy works through the mechanism of voting for winning candidates then people may become more optimistic and efficacious if their candidate wins.

8) People will become more efficacious if their party is in office. If your party is holding power, you probably feel government will be more responsive to your interests than if the other party held power. In 1984, this may mean Republicans (who controlled the Senate and the Presidency) should be more efficacious. In 1996, the hypothesis is a less clear because the Democrats controlled the Presidency, but the Republicans controlled both the House and the Senate.

9) People who spend a lot of time paying attention to news about the election campaign are likely more exposed to the horse race of political journalism, and thus may have more cynicism about politics and less regard for the role of an individual in political change. However, it could also be true that the news provides information to people that makes them feel smarter and more empowered. The literature around this hypothesis will be further discussed in the next chapter.

10) People with more interest in government affairs should feel more efficacious after an election. Understanding the results of an election requires interest and information, and people who follow government affairs probably consider themselves better able to impact political institutions.

11) Individuals who regularly discuss politics with friends or family should become more efficacious after an election. Similar to the theoretical argument behind the previous hypothesis, efficacy requires information and interest, and discussing politics is a good indicator of both.

12) The more education people have, the more efficacious they will feel. This is a common finding in the literature and makes sense, as institutions likely respond better to people with higher education, or people with higher education are better able to understand and affect those institutions.

Chapter 2: Literature Review

Scholars generally agree that political efficacy is integral to participation and beliefs about trust in government and political events, but there has been significant discussion over how to understand its relationship to other beliefs. Lane (1959) first developed the idea that there is a difference between internal efficacy and external efficacy. Internal efficacy is the perception that an individual has the skills and understanding required to influence the political system. External efficacy is the perception that institutions and government officials are responsive to individual effort.

The difference between internal and external efficacy is important because internal efficacy is dependent on an individual's self-identification, and so is unlikely to change except after dramatic life events. Internal efficacy is centered around stable personality traits like self-esteem, and so should not fluctuate very much after elections. External efficacy, however, is a perception of outside institutions, and so can, and likely does, change as individuals gather more information or different politicians are elected that might be more responsive to their problems. Yeich and Levine (1994) propose a third dimension, collective efficacy, but this dimension has not yet been subject to the same rigorous testing as the other dimensions.

The conceptual distinction between internal and external efficacy has held up over time, but in practice the survey questions used to capture the distinction has been altered. Questions on the American National Election Study attempting to tap either distinction had low internal correlations, and many researchers argued that the measures had low reliability (Acock, Clarke, and Stewart, 1985; Finkel, 1985; Niemi, Craig, and Mattei, 1991). In 1982 and 1984, ANES deleted a subset of questions on political efficacy, which created widespread calls for more effective measures of tapping efficacy.

In response to these concerns, the American National Election Study tested a variety of internal and external efficacy questions in the 1987 NES Pilot Study. The new questions seemed to be much more reliable measures of internal efficacy, and four of them were included in the 1988 NES survey (Niemi et al., 1991). These questions were "I consider myself to be well qualified to participate in politics", "I feel that I have a pretty good understanding of the important political issues facing our country," "I feel that I could do as good a job in public office as most other people," and "I think that I am better informed about politics and government than most people."

Through a covariance analysis, questions that several scholars had used to tap internal efficacy, including "People like me don't have any say about what the government does," (nosay) and "I don't think public officials care much what people like me think," (nocare) turned out to measure external efficacy (Niemi et al., 1991). Clarke and Acock (1989) defend their classification of nosay and nocare as measuring internal efficacy because those questions seemed to be more stable than other questions, consistent with the internal efficacy hypothesis, and also

because they had a high correlation with questions about political trust and personal competence (Clarke and Acock, 1989). However, subsequent analyses showed that nosay and nocare were more stable because the comparison efficacy questions inaccurately measured efficacy, and so nosay and nocare should be more accurately classified as questions measuring external efficacy, not internal.

This analytical point is extremely important to this paper, as it has often been overlooked in subsequent research. Political efficacy has proven to be an easy concept to grasp, but a much more difficult construct to measure. Before Niemi et. al (1991) did the most definitive analysis of which question appropriately measured which construct, several scholars pointed out that different questions substantively changed many results (Craig and Maggiotto, 1982). However, even after this controversy has been essentially resolved, some research into efficacy has continued to be careless in coding questions as measuring external and internal efficacy. One contribution of the analysis presented in this paper is to go back to data analyzed before Niemi et. al (1991) and apply a more modern understanding of which questions measure efficacy best.

There is a considerable literature linking efficacy to political participation. Voter turnout is highly correlated with high scores of both external and internal efficacy (Ginsberg and Weissberg 1978). The argument for why efficacy should increase turnout is clear. According to the rational voter model, the higher the likelihood someone has of changing the vote result, the more likely they will cast a ballot. Efficacy is an individual's perception of his or her influence on the world, and so people with perceptions of high potential impact should value their vote more. There is also a case to be made for the opposite effect, that participation changes a person's attitudes about the political process. The act of voting could increase feelings of civic duty and political efficacy; when people go to the polls they may later rationalize that it must have been because their vote was important.

The endogeneity of turnout and efficacy has been shown empirically. Finkel (1985) finds reciprocal effects between voter turnout and external efficacy. Stenner-Day and Fischle (1992) uses more sophisticated methods to come to the same conclusion: political participation and political efficacy reinforce each other. It is still unclear if this relationship is causal or if it is simply a byproduct of other beliefs or real electoral events. For instance, if a person is surveyed in the midst of a small, extremely close election, he may answer that he believes he can change political institutions, and he may also be more likely to vote, but it is not his increased efficacy that caused his participation.

Unfortunately, even Finkel's analysis was the result of confusion about the correct constructs to measure political efficacy. Though he acknowledged considerable doubt about the measurement of the constructs, he still used the nosay question to measure internal efficacy, and the nocare question to measure external efficacy, even though the two are highly correlated and appear to both measure external efficacy. By replicating much of Finkel's coding, Stenner-Day and Fischle (1992) are also affected by improperly coding questions measuring internal efficacy into external efficacy.

A second oversight of research into efficacy and turnout is a lack of control over variation in education. Finkel (1985) shows that some results can change based on whether or not controls are enacted for a respondent's education, as education and efficacy are highly correlated. This makes considerable theoretical sense, as a person's abilities to influence external institutions often vary with educational attainment. Also, efficacy is highly correlated with political participation, which is greatly influenced by education.

Clarke and Acock (1989) examine several hypotheses surrounding political efficacy, but they are subject to the improper measures of efficacy problem and also fail to control for the possible confounding effect of education. Clarke and Acock test three hypotheses: that voters are more likely than nonvoters to increase in efficacy after an election, that voters will increase in efficacy only if they voted for the winning candidate, and that people who support the winning candidate will increase in efficacy even if they don't vote. The authors analyze the 1984 ANES and find that neither voting nor campaign participation influences external or internal political efficacy. Simply preferring a candidate to win, if an individual did not cast a ballot, also does not increase efficacy. Instead, only people who vote for winning candidates end up being more empowered.

However, the authors control for no demographic or other political beliefs, meaning their results could be contaminated by the likely effects of income, education, and political opinions like civic duty that are highly correlated with efficacy. Also, the authors discard one political efficacy question, "Sometimes politics and government seem so complicated that a person like me can't really understand what's going on", and classify both nosay and nocare as measuring internal efficacy instead of external efficacy. Although the careful analyses of efficacy measures came after Clarke and Acock's research and so the authors are not at fault, it remains an open question how much the changing the measurement of the efficacy constructs will change their results.

More recent research has suggested political efficacy may act as a moderating influence on emotional involvement in politics. This strain of research links efficacy to changes in cognitive forms of participation, like campaign interest or anxiety, not concrete forms like voting or volunteering for a campaign. Marcus and MacKuen (1993) demonstrated that the individuals' emotions about political campaigns can affect how efficiently they gather and process information. They argued that candidate-induced anxiety increases learning about politics, but it did not increase involvement in a campaign. Other scholars have argued that internal efficacy combines with anxiety about politics to exert a positive interact on campaign involvement (Rudolph, Gangl, and Stevens, 2000).

Marcus and MacKuen (1993) and Rudolph, Gangl, and Stevens (2000) measure internal efficacy by aggregating 3 questions: "People like me don't have any say about what the government does", "Sometimes politics and government seem so complicated that a person like me can't really understand what's going on", and "Voting is the only way that a person like me can have any say about how the government runs things". The "voting only" question has been the subject of

frequent criticism, but the authors say excluding it did not change their substantive conclusions. However, *nosay* has been shown to more accurately measure external than internal efficacy, so it is possible that both forces play a role in moderating anxiety about a campaign.

The influence of political efficacy has also been used as a reason for the impact of direct democracy on voters' civic orientations. Gilens, Glaser and Mendelberg (2001) show that both state-specific news coverage of ballot propositions increases internal efficacy. The authors find no mediating impact of the exposure to news. Their finding is interesting because a theoretical argument could be made for media coverage either increasing or decreasing efficacy. People who spend a lot of time paying attention to the news are likely more exposed to the horse race of political journalism, and thus may have more cynicism about politics and less regard for the role of an individual in political change. However, it could also be true that the news provides information to people that makes them feel smarter and more empowered. The case of coverage about ballot propositions may be special as it may increase people's empowerment by emphasizing the role of direct instead of representative democracy.

This analysis will expand the current literature in several ways. First, I will apply the best current research on which questions measure efficacy. A significant part of the efficacy literature is based on out of date codings, and it is unclear how much changing the codings of questions like "*nosay*" and "*nocare*" will change substantive results about efficacy. Additionally, I will expand analysis into the 1996 ANES, a dataset that has not been examined yet for trends in political efficacy. Most papers trying to show which factors are important for predicting change in efficacy have used the 1984 ANES, the only other year in which the ANES asked efficacy questions before and after the election. Some of the effects seen in 1984 may be specific to the election context or candidates themselves. Finally, I will expand research into predictors of change in efficacy by analyzing a range of new possible predictors, including media exposure, civic duty, interest in government, and opinions about the state of the economy.

Chapter 3: Methodology

Both the 1984 and the 1996 American National Election studies were used for this analysis. In the 1984 ANES, internal efficacy, or a person's belief in their own ability to influence government, was measured by agreement or disagreement to the statement "Sometimes politics and government seem so complicated that a person like me can't really understand what's going on." Agreement was coded as 0, and disagreement as 1. This question was asked both before and after the election.

External efficacy, a person's belief in the responsiveness of government to individual behavior, was measured by four questions: "How much do you feel that having elections makes the government pay attention to what people think?", "Over the years, how much attention do you feel the government pays to what people think when it decides what to do?", "People like me don't have any say in what the government does", and "I don't think public officials care much about what people like me think". Respondents could answer "A good deal," "Some," or "Not much" to the first two questions, and agreed or disagreed with the latter two. The 4 questions were averaged into an index for pre-election and post-election scores.

To measure turnout in 1984, I combined self-reported turnout with validated turnout by the interviewer. If the respondent said he voted and the interviewer validated the vote, the respondent was coded 1. If the respondent said he did not vote and the interviewer did not validate the vote, the respondent was coded 0. If the respondent and the interviewer validating the vote disagreed on the result, the respondent was dropped from the sample.

Dummy variables were also used for education, income, gender, and race. We used four categories for education: junior college, college, and post-graduate attainment, and omitted high school attendance and graduation. We also used four categories for income: annual respondent income between \$10,000 and \$20,000, between \$20,000 and \$45,000, and above \$45,000, and omitted respondents with income less than \$10,000 a year. For gender, we coded 1 for female respondents and 0 for male respondents. Age was kept on a linear scale, and we also included a variable age squared to check for nonlinear effects. We used black and white categories for race, as the number of cases was too small to include other categories. Voting decision was coded 1 for respondents voting for Ronald Reagan, and 0 for respondents voting for Walter Mondale.

Four dichotomous questions, asking respondents about campaign participation were aggregated into a variable on campaign interest. The four questions were worded as follows: "Did you wear a campaign button, put a campaign sticker on your car, or place a sign in your window or in front of your house?", "Did you go to any political meetings, rallies, speeches, dinner, or things like that in support of a particular candidate?", "Did you do any (other) work for one of the parties or candidates?", and "During an election year people are often asked to make a contribution to support campaigns. Did you give money to support an individual candidate running for political office?" Respondents were coded with a 0 if they answered no to all four questions, and 1 if participated in any activity.

A respondent's civic duty was measured by agreement or disagreement to the statement "If a person doesn't care how an election comes out, then that person shouldn't vote in it." Agreement was coded as 0, and disagreement as 1. Party identification was measured by asking "Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or what?" If respondents answered either Democrat or Republican, they were asked "Would you call yourself a strong Republican (or Democrat) or a not very strong Republican (or Democrat). If they answered independent, they were asked "Do you think of yourself as closer to the Republican party or to the Democratic party?" The party identification summary was coded as 0 for a strong Democrat to 1 for a strong Republican.

Political ideology was captured by a similar process to party identification. Respondents were asked "In general, when it comes to politics, do you usually think of yourself as a liberal, a conservative, a moderate, or what?" and then were asked a follow-up question based on their response. Ideology was coded from 0 for a strong liberal to 1 for a strong conservative.

The respondent's view of the economy was captured by the question "Would you say that over the past year the nation's economy has gotten better, stayed the same, or gotten worse?" and a second question "Would you say much better (or worse) or somewhat better (or worse)?" This economic view was coded from 0 for much worse to 1 for much better.

The respondent's view of his or her own economic situation was measured by the question "Would you say that the economic policies of the federal government have made you (and your family living here) better off, worse off, or haven't made much difference either way?" and a second question "Would you say much better (or worse) or somewhat better (or worse)?" Responses were coded from 0, for much worse, to 1, for much better.

The respondent's attention paid to public affairs was measured by the question "Would you say that you follow what's going on in government and public affairs most of the time, some of the time, only now and then, or hardly at all?" Responses were coded from 0, for hardly at all, to 1, for most of the time. Trust in government was measured by the question "How much of the time do you think you can trust the government in Washington to do what is right—just about always, most of the time, or only some of the time?" Responses were coded from 0, for none of the time (when respondents volunteered the answer) to 1, for just about always.

Belief in the power of government interests was coded by the question "Would you say the government is pretty much run by a few big interests looking out for themselves or that it is run for the benefit of all the people?" Responses were coded as 1, for the benefit of all, or 0, for a few big interests. Respondent's belief in the integrity of government was measured by the question "Do you think that quite a few of the people running the government are crooked, not very many are, or do you think hardly any of them are crooked?" Responses were coded from 1, for hardly any, to 0 for quite a few. Trust in government, the power of big interests, and the integrity of government questions were only once, asked after the election.

I used feeling thermometers to gauge a respondent's feelings towards a candidate. Respondents were told "I'd like to get your feelings toward some of our political leaders and some people who are in the news these days. I will use something we call the feeling thermometer and here is how it works: I'll read the name of a person and I'd like you to rate that person using the feeling thermometer. Ratings between 50 degrees and 100 degrees mean that you feel favorable and warm toward the person. Ratings between 0 degrees and 50 degrees mean that you don't feel favorable toward the person and that you don't care too much for that person." I created a feeling thermometer differential for Reagan and Mondale by subtracting Mondale's thermometer score from Reagan's. Both pre-election and post-election thermometer scores were used.

Political discussions were measured by the question "How many days in the past week did you talk about politics with your family or friends?" Responses were coded from 0 to 7 days a week. How much campaign news the respondent watched on television was coded from 1, for a great deal, to 0, for both none and very little.

Watching the national news was measured by interacting attention paid to the national news by exposure. Exposure was measured by the question "How many times in the past week did you watch the national news on TV?" Attention paid to the news was measured by the question "When you watch the news on TV, do you pay a great deal of attention to news about government and politics, do you pay some attention, or don't you pay much attention to news about government and politics?" Both questions were coded from 0, for low attention and low exposure, to 1, for high attention and high exposure. An interaction term multiplying the two effects was also used.

In the 1996 ANES, external efficacy was measured by the question "People like me don't have any say in what the government does". This question was the only question tapping either external or internal efficacy that was asked in both the pre-election and post-election questionnaires. Respondents could strongly or somewhat disagree or agree to the question. Voter turnout in 1996 was coded using self-reported turnout. If the respondent reported voting he was coded as a 1, and if he reported not voting he was coded as a 0.

Dummy variables were also used for education, income, gender, and race. We used four categories for education: junior college, college, and post-graduate attainment, and omitted high school attendance and graduation. We also used four categories for income: annual respondent income between \$10,000 and \$20,000, between \$20,000 and \$45,000, and above \$45,000, and omitted respondents with income less than \$10,000 a year. For gender, we coded 1 for female respondents and 0 for male respondents. Age was kept on a linear scale, and we also included a variable age squared to check for nonlinear effects. We used black and white categories for race, as the number of cases was too small to include other categories. Voting decision was coded 1 for respondents voting for Bill Clinton, and 0 for respondents voting for Bob Dole.

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The respondent’s view of the economy was captured by the question “Would you say that over the past year the nation’s economy has gotten better, stayed the same, or gotten worse?” and a second question “Would you say much better (or worse) or somewhat better (or worse)?” This economic view was coded from 0 for much worse to 1 for much better.

The respondent’s view of his or her own economic situation was measured by the question “Would you say that the economic policies of the federal government have made you (and your family living here) better off, worse off, or haven’t made much difference either way?” and a second question “Would you say much better (or worse) or somewhat better (or worse)?” Responses were coded from 0, for much worse, to 1, for much better.

Four dichotomous questions, asking respondents about campaign participation were aggregated into a variable on campaign interest. The four questions were worded as follows: “Did you wear a campaign button, put a campaign sticker on your car, or place a sign in your window or in front of your house?”, “Did you go to any political meetings, rallies, speeches, dinner, or things like that in support of a particular candidate?”, “Did you do any (other) work for one of the parties or candidates?”, and “During an election year people are often asked to make a contribution to support campaigns. Did you give money to support

an individual candidate running for political office?" Respondents were coded with a 0 if they answered no to all four questions, and 1 if participated in any activity.

Party identification was measured by asking "Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or what?" If respondents answered either Democrat or Republican, they were asked "Would you call yourself a strong Republican (or Democrat) or a not very strong Republican (or Democrat). If they answered independent, they were asked "Do you think of yourself as closer to the Republican party or to the Democratic party?" The party identification summary was coded as 0 for a strong Democrat to 1 for a strong Republican.

Chapter 4: Discussion

Why do some people feel more politically empowered than others? What factors cause people's sense of empowerment to increase or decrease? Do people increase in efficacy because they vote, because they vote for the winning candidate, or simply because they prefer the winning candidate but do not vote? This analysis shows that people who vote for the winning candidate probably do increase in efficacy more than people voting for the winner, but this effect may be confined to specific candidates and elections. A more durable effect is that people feel more empowered after they vote.

Similar analyses were conducted using the 1996 American National Election Study and the 1984 National Election Study. In 1996, where only one efficacy question was asked both before and after the election, I regressed each individual predictor along with pre and post election external efficacy. For variables in 1984, pre-election internal efficacy (a term not included in 1996) was in the regression. These results are seen in the first column of results in all tables.

The second column of the tables shows coefficients from a multivariate regression that included pre-election efficacy, turnout, and a battery of predictors such as economic views, campaign participation, party identification, a media exposure variable, and how often respondents discussed politics. In 1984, the predictors civic duty and interest in government affairs were also included. Each regression also had one of four additional predictor variables: pre-election feeling thermometer differential between candidates, post-election differential, candidate choice (who a respondent voted for), and candidate preference (who a respondent favored, regardless of whether or not he voted). In the third results column of each table a turnout*preference interaction term is tested alongside other predictors.

The single predictor regressions show considerably more statistical significance than the multivariate regressions, implying some multicollinearity. In the single regressions for external efficacy in 1984, turnout, pre- and post-election feeling thermometers, candidate vote choice, candidate preference, turnout*preference, pocketbook and sociotropic economic views, political ideology, and interest in government affairs are all significant at the 5% level, and all but discussion of politics and ideology are significant at the 1% level. The only predictors that are not significant are campaign participation, civic duty, and the media exposure variable. For internal political efficacy in 1984, sociotropic economic views, interest in government affairs, civic duty, and regular discussion of politics are all significant. However, the main predictors of interest—turnout, thermometer rating differential, vote choice, preference, and turnout*preference—are never significant.

In the single regressions in 1996, turnout, turnout*preference, pocketbook and sociotropic economic views, regular discussion of politics, and a media exposure term are all significant. Of the main predictors, only turnout and turnout*preference are ever significant in 1996. Feeling thermometer differential, campaign participation, party identification, candidate vote choice, and candidate

preference are not significant. For the external efficacy regressions in 1984, often only pre-election efficacy, and interest in government affairs are statistically significant. Candidate vote choice and candidate preference are the only significant predictors. While pre- and post-election thermometer differentials are significant, the coefficients tend to be extremely small.

Table 1 tests all the main hypothesis of this paper by including turnout, the respondent's preferences, and the turnout*preference interaction. When all three factors are controlled for, they are statistically significant at the 1% level. In all other tables involving 1984, turnout does not achieve statistical significance, and the interaction term only sometimes becomes significant.

Table 1 suggests that if people vote, they increase in political efficacy. Similarly, if they preferred to vote for Reagan over Mondale, even if they did not vote, they increased in significance. However, a counterintuitive finding is that, if anything, voting for the winner in the election actually decreases a person's efficacy, as shown by the turnout*preference interaction. This interaction compares people who voted for Reagan with people who voted for Mondale or did not vote. As it turns out, people who voted for Reagan actually decreased in efficacy compared to the other people.

Underlining the importance of controlling for education, it seems that attending a college significantly increases efficacy compared to a dummy variable of being a high school dropout. Throughout these analyses, the exact education dummy variables that achieved significance varied with the predictors, but in almost every equation an education dummy was significant with a positive coefficient. Education could be causally related with efficacy—people attain education and they become more able to navigate through choosing a candidate and voting, and feel as if they make more of an impact. Education could also be endogenously related with efficacy, however, if people who are more efficacious and empowered choose to seek out more education.

Campaign participation is commonly assumed to be a good predictor of political efficacy. Like people who vote, people who engage in time and information costly activities like campaign participation should have a self-justification for the behavior. People would not give money or try to convince people to vote for their preferred candidate if they did not believe their actions as an individual had some effect on the political system. However, even without controlling for turnout campaign participation is not a significant predictor of change in efficacy. This could be because the participation variable used obscures who the respondent campaigned for—if only campaigning for the winning candidate increases efficacy, lumping all participants together conflates two separate effects. However, as we have seen that simply voting increases efficacy, it remains a surprising result that the same logic does not hold true for campaign participation.

Table 1 also shows the importance of paying attention to government in promoting external efficacy. This is one variable that has achieved little attention in the political psychology literature, but it makes theoretical sense that it would be

correlated with efficacy. People who pay attention to politics and have a high interest in government are probably more empowered and believe, rightly so, that government pays attention to people like them. This relationship could also be the result of other factors uncontrolled for in this equation, like prior experiences in politics. If we believe that turnout increases efficacy, people who are more interested in politics may have a longer history of voting.

Table 1: Regressions Predicting Post-election External Efficacy Using Post-Election Candidate Preferences (1984 ANES)+, ++

Predictor	Coefficients from Single Predictor Regressions	Coefficients from Multivariate Regressions	Coefficients from Multivariate Regressions
External efficacy (pre-election)		.50**	.50**
Internal efficacy (pre-election)	.06**	.03	.03
Turnout	.06**	.02	.10**
Candidate preference	.12**	.09**	.17**
Turnout*Preference	.06**		-.13**
Pocketbook economy (pre-election)	.14**	.07	.07
Sociotropic economy (pre-election)	.15**	.02	.02
Campaign participation (post-election)	.01	-.01	-.01
Political ideology (pre-election)	.06*	.00	.02
Interest in government affairs (pre-election)	.12**	.08**	.08**
Civic duty (pre-election)	.02	.01	.00
Regular discussion of politics (post-election)	.07*	.04	.04
Newspaper and TV attention * exposure (post-election)	-.08	-.13	-.13

Gender		-.02	-.02
White		.03	.02
Non-white, Non-black		.07	.06
Lower middle income		.01	.01
Upper middle income		.04	.04
High income		.04	.04
No reported income		.01	.00
High school degree		.02	.01
Some college		.08*	.07*
College degree		.04	.03
Postgraduate degree		.06	.05
No reported education		.23	.22
Age		.00	.00
N		784	784

+This model was also estimated using an age squared variable, which was not significant.

++Ns for the equation using simple predictors ranged from 836 to 908.

*Statistically significant at the 5% level.

**Statistically significant at the 1% level.

Tables 2 and 3 show predictions of post-election external efficacy alongside turnout, the interaction between turnout and preference, and pre- and post-election feeling thermometer differentials between Reagan and Mondale. In both equations, the feeling thermometer coefficient is statistically significant at the 5% level, but it is extremely small. Feeling thermometer differentials go from -100, when a respondent gives Mondale a 100 thermometer rating and Reagan a 0, to 100, when a respondent gives Reagan a 100 and Mondale a 0. Because of this wide variance in scores, small coefficients do not mean that how people feel about the candidates is not a significant predictor.

Feeling thermometer differentials tap a different construct from simply choosing a candidate. Simply measuring if a respondent picks Reagan over Mondale might not lead to a good predictor of changes in efficacy because he may only slightly favor Reagan. People who strongly believe their candidate should win should be more likely to increase in efficacy if he does than people who voted with weaker preferences. These tables show that the difference in opinions between candidates does make a difference in the expected direction: people who strongly supported Reagan increased more in efficacy after he won than people who weakly supported him over Mondale.

In both multivariate regressions in Table 3, news media exposure is also statistically significant, though it is not significant in individual regressions. The news media variable used averages newspaper exposure and attention with television exposure and attention. This effect may be because people who spend a lot of time paying attention to the news are likely more exposed to the horse race of political journalism, and thus may have more cynicism about politics and less regard for the role of an individual in political change. However, it could also be true that the news provides information to people that makes them feel smarter and more empowered. The news has not been well documented as a predictor of political efficacy, and only appears significant in some of the equations shown here, so it would likely be a productive topic for future research.

Table 2: Regressions Predicting Post-election External Efficacy Using Pre-Election Thermometer Ratings of Candidates (1984 ANES)+, ++

Predictor	Coefficients from Single Predictor Regressions	Coefficients from Multivariate Regressions	Coefficients from Multivariate Regressions
External efficacy (pre-election)		.50**	.49**
Internal efficacy (pre-election)	.06**	.03	.03
Turnout	.06**	.01	.03
Reagan feeling therm minus Mondale feeling therm (pre-election)	.00**	.00*	.00*
Turnout*Preference	.08**		-.02
Pocketbook economy (pre-election)	.14**	.06	.07
Sociotropic economy (pre-election)	.15**	.02	.02*

Campaign participation (post-election)	.01	-.01	-.02
Political ideology (pre-election)	.06*	.05	.04
Interest in government affairs (pre-election)	.12**	.10**	.08*
Civic duty (pre-election)	.02	.01	.00
Regular discussion of politics (post-election)	.07*	.03	.04
Newspaper and TV attention * exposure (post-election)	-.08	-.13	-.13
Gender		-.01	-.02
White		.05	.04
Non-white, Non-black		.08	.07
Annual income between \$10,000 and \$21,999		.00	.01
Annual income between \$22,000 and \$44,999		.04	.04
Annual income above \$45,000		.04	.04
No reported income		-.03	.00
High school degree		.00	.03
Some college		.06*	.09*
College degree		.02	.04
Postgraduate degree		.03	.05
No reported education		.21	.23
Age		.00	.00
N		845	784

*This model was also estimated using an age squared variable, which was not significant.

+Ns for the equation using simple predictors ranged from 860 to 908.

*Statistically significant at the 5% level.

**Statistically significant at the 1% level.

Table 3: Regressions Predicting Post-election External Efficacy Using Post-Election Thermometer Ratings of Candidates (1984 ANES)^{+,++}

Predictor	Coefficients from Single Predictor Regressions	Coefficients from Multivariate Regressions	Coefficients from Multivariate Regressions
External efficacy (pre-election)		.50**	.49**
Internal efficacy (pre-election)	.06**	.03	.03
Turnout	.06**	.02	.04
Reagan feeling therm minus Mondale feeling therm (post-election)	.00**	.00**	.00**
Turnout*Preference	.08**		-.04
Pocketbook economy (pre-election)	.14**	.05	.07
Sociotropic economy (pre-election)	.15**	.01	.02
Campaign participation (post-election)	.01	-.01	-.02
Political ideology (pre-election)	.06*	.04	.04
Interest in government affairs (pre-election)	.12**	.10**	.08**
Civic duty (pre-election)	.02	.01	.01
Regular discussion of politics (post-election)	.07*	.03	.04
Newspaper and TV attention * exposure (post-election)	-.08	-.14*	-.14*
Gender		-.01	-.02
White		.04	.04

Non-white, Non-black		.08	.07
Lower middle income		.00	.01
Upper middle income		.04	.04
High income		.03	.04
No reported income		-.03	-.01
High school degree		.00	.03
Some college		.06*	.08*
College degree		.02	.04
Postgraduate degree		.03	.06
No reported education		.22	.24
Age		.00	.00
N		838	778

+This model was also estimated using an age squared variable, which was not significant.

++Ns for the equation using simple predictors ranged from 883 to 908.

*Statistically significant at the 5% level.

**Statistically significant at the 1% level.

Table 4 presents candidate vote choice as a predictor of changes in external efficacy. The regression was not run alongside turnout*preference, as that would create perfect multicollinearity. People who voted for Reagan increased in efficacy more than respondents who voted for Mondale. This finding supports other findings in the literature that show that voting for the winner makes people feel empowered. However, as most studies have used incorrect measures for external efficacy and do not control for important effects like education, it was not evident that this effect would persist. Indeed, the questions used in this study to construct a measure of external efficacy are dismissed as static by Clarke and Acock (1989), who try to show that they are internal efficacy and do not change by voting for the winner.

Civic duty, measured by how important a respondent believes the act of voting is, is not statistically significant in either single regressions or multivariate regressions. A person's civic duty generally has a high correlation with his sense of

political efficacy, so it is in some ways surprising that civic duty is not a good predictor of change in efficacy. However, this fits with hypothesis 5, that people who vote to satisfy civic duty do not need to rationalize their action by increasing in efficacy. Civic duty may also not be a good predictor because while voting, especially for the winner, increases efficacy, it is not clear why voting would increase civic duty—people who have high civic duty would be more likely to vote, but would probably see it as a fulfillment of their duty, not as something that changes with the candidates.

Having a regular discussion of politics with friends or family is also not a statistically significant predictor of political efficacy in any regressions run in 1984 (it is statistically significant as an individual predictor for external efficacy in 1996). Like civic duty, regularly discussing politics is highly correlated with political efficacy, but it does not appear to change for people voting for the winner. If people are convinced they are surrounded by people also voting for the winner, they may be more likely to discuss politics, but this does not necessarily make them more empowered or feel more like an individual can change political institutions.

Table 4: Regressions Predicting Post-election External Efficacy Using Post-Election Candidate Vote Choice (1984 ANES)+, ++

Predictor	Coefficients from Single Predictor Regressions	Coefficients from Multivariate Regressions
External efficacy (pre-election)		.52**
Internal efficacy (pre-election)	.06**	.02
Candidate vote choice	.10**	.07*
Pocketbook economy (pre-election)	.14**	.07
Sociotropic economy (pre-election)	.15**	-.05
Campaign participation (post-election)	.01	-.02
Political ideology (pre-election)	.06*	.01
Interest in government affairs (pre-election)	.12**	.08*
Civic duty (pre-election)	.02	.00

Regular discussion of politics (post-election)	.07*	.06
Newspaper and TV attention * exposure (post-election)	-.08	-.13
Gender		-.03
White		.02
Non-white, Non-black		.03
Lower middle income		.04*
Upper middle income		.08*
High income		.09
No reported income		.03
High school degree		.01
Some college		.07
College degree		.04
Postgraduate degree		.04
No reported education		.27
Age		.00
N		615

+This model was also estimated using an age squared variable, which was not significant.

++Ns for the equation using simple predictors ranged from 654 to 908.

*Statistically significant at the 5% level.

**Statistically significant at the 1% level.

Table 5 shows a prediction of post-election internal efficacy using turnout, candidate preference, and the interaction between the two. Other than the pre-election efficacy measures, only interest in government and an education dummy

achieve significance. This is a clear distinction between internal and external efficacy, and it concurs with other findings in the literature. Internal efficacy relies on static measures like a person's self-esteem, while external efficacy is more likely to change with influences like the campaign season. This pattern is seen consistently through the rest of the internal efficacy tables for 1984, Tables 5-8.

Table 5: Regressions Predicting Post-election Internal Efficacy Using Post-Election Candidate Preferences (1984 ANES)+, ++

Predictor	Coefficients from Single Predictor Regressions	Coefficients from Multivariate Regressions	Coefficients from Multivariate Regressions
External efficacy (pre-election)	.03	.13**	.13**
Internal efficacy (pre-election)		.43**	.43**
Turnout	.02	-.02	-.03
Candidate preference	.03	.00	-.01
Turnout*Preference	.03		.01
Pocketbook economy (pre-election)	.00	-.07	-.07
Sociotropic economy (pre-election)	.10*	.07	.07
Campaign participation (post-election)	.05	.03	.03
Political ideology (pre-election)	-.03	.01	.01
Interest in government affairs (pre-election)	.13**	.10*	.10*
Civic duty (pre-election)	.06*	.03	.03
Regular discussion of politics (post-election)	.15**	.06	.06
Newspaper and TV attention * exposure (post-election)	.18	.10	.10
Gender		-.02	-.02

White		.07	.07
Non-white, Non-black		.07	.07
Lower middle income		.00	.00
Upper middle income		-.02	-.02
High income		.04	.04
No reported income		-.06	-.06
High school degree		-.01	-.01
Some college		.04	.04
College degree		.06	.06
Postgraduate degree		.17*	.17*
No reported education		-.22	-.22
Age		.00	.00
N		806	806

*This model was also estimated using an age squared variable, which was not significant.

+Ns for the equation using simple predictors ranged from 860 to 938.

*Statistically significant at the 5% level.

**Statistically significant at the 1% level.

Table 6: Regressions Predicting Post-election Internal Efficacy Using Pre-Election Thermometer Ratings of Candidates (1984 ANES)+, ++

Predictor	Coefficients from Single Predictor Regressions	Coefficients from Multivariate Regressions	Coefficients from Multivariate Regressions
External efficacy (pre-election)	.18**	.13**	.14**

Internal efficacy (pre-election)		.45**	.44**
Turnout	.02	-.02	-.03
Reagan feeling therm minus Mondale feeling therm (pre- election)	.00	.00	.00
Turnout*Preference	.03		.01
Pocketbook economy (pre- election)	.00	-.07	-.07
Sociotropic economy (pre- election)	.10*	.06	.07
Campaign participation (post- election)	.05	.03	.03
Political ideology (pre-election)	-.03	.00	.02
Interest in government affairs (pre-election)	.13**	.09*	.10*
Civic duty (pre-election)	.06*	.03	.03
Regular discussion of politics (post-election)	.15**	.07	.06
Newspaper and TV attention * exposure (post-election)	.18	.10	.10
Gender		-.03	-.02
White		.07	.07
Non-white, Non-black		.08	.07
Annual income between \$10,000 and \$21,999		.01	.00
Annual income between \$22,000 and \$44,999		-.01	-.02
Annual income above \$45,000		.04	.04
No reported income		-.03	-.06
High school degree		.00	-.01

Some college		.06	.04
College degree		.07	.06
Postgraduate degree		.18*	.17*
No reported education		-.20	-.21
Age		.00	.00
N		870	806

+This model was also estimated using an age squared variable, which was not significant.

++Ns for the equation using simple predictors ranged from 860 to 938.

*Statistically significant at the 5% level.

**Statistically significant at the 1% level.

Table 7: Regressions Predicting Post-election Internal Efficacy Using Post-Election Thermometer Ratings of Candidates (1984 ANES)+, ++

Predictor	Coefficients from Single Predictor Regressions	Coefficients from Multivariate Regressions	Coefficients from Multivariate Regressions
External efficacy (pre-election)	.03	.13**	.14**
Internal efficacy (pre-election)		.45**	.43**
Turnout	.02	-.02	.00
Reagan feeling therm minus Mondale feeling therm (post-election)	.00	.00	.00
Turnout*Preference	.03		-.03
Pocketbook economy (pre-election)	.00	-.08	-.08
Sociotropic economy (pre-election)	.10*	.04	.04
Campaign participation (post-election)	.05	.03	.03

Political ideology (pre-election)	-.03	-.05	-.02
Interest in government affairs (pre-election)	.13**	.09*	.10*
Civic duty (pre-election)	.06*	.04	.03
Regular discussion of politics (post-election)	.15**	.07	.06
Newspaper and TV attention * exposure (post-election)	.18	.10	.10
Gender		-.02	-.02
White		.06	.05
Non-white, Non-black		.06	.05
Lower middle income		.00	.00
Upper middle income		-.01	-.02
High income		.04	.04
No reported income		-.02	-.05
High school degree		.00	-.02
Some college		.06	.04
College degree		.07	.06
Postgraduate degree		.19*	.17*
No reported education		-.20	-.22
Age		.00	.00
N		860	798

+This model was also estimated using an age squared variable, which was not significant.

++Ns for the equation using simple predictors ranged from 908 to 938.

*Statistically significant at the 5% level.

**Statistically significant at the 1% level.

Table 8: Regressions Predicting Post-election Internal Efficacy Using Post-Election Candidate Vote Choice (1984 ANES)+, ++

Predictor	Coefficients from Single Predictor Regressions	Coefficients from Multivariate Regressions
External efficacy (pre-election)	.03	.17**
Internal efficacy (pre-election)		.43**
Candidate vote choice	.02	-.01
Pocketbook economy (pre-election)	.00	-.01
Sociotropic economy (pre-election)	.10*	.02
Campaign participation (post-election)	.05	.04
Political ideology (pre-election)	-.03	-.01
Interest in government affairs (pre-election)	.13**	.08
Civic duty (pre-election)	.06*	.04
Regular discussion of politics (post-election)	.15**	.10
Newspaper and TV attention * exposure (post-election)	.18	.15
Gender		-.03
White		.11
Non-white, Non-black		.16
Lower middle income		.04

Upper middle income		.03
High income		.11
No reported income		-.04
High school degree		-.04
Some college		-.01
College degree		.02
Postgraduate degree		.13
No reported education		-.04
Age		.00
N		631

+This model was also estimated using an age squared variable, which was not significant.

++Ns for the equation using simple predictors ranged from 672 to 938.

*Statistically significant at the 5% level.

**Statistically significant at the 1% level.

Another contribution of this study was to expand research about the reasons behind change in political efficacy into the 1996 American National Election Study. Some political psychologists believe both internal and external efficacy to be mostly static, and so questions measuring efficacy are rarely asked in both pre-election and post-election questionnaires. 1996 is the only year in ANES history besides 1984 to ask questions measuring efficacy in both questionnaires.

Table 9 shows single regressions between external efficacy, voter turnout, candidate preference, and the interaction between turnout and preference. Unlike in 1984, candidate preference and the interaction term are not statistically significant at the 5% level. However, simply the act of voting is a significant predictor of external efficacy. The nonsignificance of candidate preference and the interaction term could be a function of weaker candidate preferences in 1996 than in 1984. If people were in general more indifferent to Reagan compared to Mondale then they were between Clinton and Dole, having their preferred candidate win would not increase in efficacy.

Except for when candidate vote choice is included, sociotropic economic views are a statistically significant predictor of post-election external efficacy in

every specification in the 1996 ANES. Sociotropic views, or a respondent's perspective on the state of the U.S. economy over the last 12 months, are significant in single regressions in both external and internal efficacy in 1984, but they often lose their significance in multivariate regressions. Why do people who are more optimistic about the economy feel more efficacious, and not simply people who are optimistic about their own financial situation? This could be because efficacy is also a form of optimism: people who are efficacious feel institutions are responsible to individuals. Pocketbook economic views, a measure of people's own financial situation, might not be significant because they rely on tangible events like losing a job or getting a promotion, not on a sense of the state of the outside world.

Table 9: Regressions Predicting Post-election External Efficacy Using Post-Election Candidate Preference (1996 ANES)+, ++

Predictor	Coefficients from Single Predictor Regressions	Coefficients from Multivariate Regressions	Coefficients from Multivariate Regressions
External efficacy (pre-election)		.43**	.43**
Turnout	.11**	.08**	.05
Candidate preference (post-election)	-.01	.01	-.03
Turnout*Preference	.04**		.05
Pocketbook economy (pre-election)	.13**	.01	.01
Sociotropic economy (pre-election)	.13**	.08*	.08*
Campaign participation (post-election)	.04	.00	.00
Regular discussion of politics (post-election)	.08**	.02	.02
Party identification (pre-election)	.01	.01	.02
Newspaper and TV attention * exposure (post-election)	.20**	.03	.04
Gender		.00	.00
White		-.03	-.03

Non-white, Non-black		-.06	-.06
Annual income between \$10,000 and \$21,999		-.03	-.03
Annual income between \$22,000 and \$44,999		-.02	-.02
Annual income above \$45,000		.00	.00
No reported income		-.07	-.07
High school degree		.02	.03
Some college		.02	.02
College degree		.08**	.08**
Postgraduate degree		.10**	.10**
No reported education		.08	.07
Age		.00*	.00*
N		1291	1291

+This model was also estimated including age squared as a predictor, which was not significant.

++Ns for the equation using simple predictors ranged from 1029 to 1524.

*Statistically significant at the 5% level.

**Statistically significant at the 1% level.

Table 10: Regressions Predicting Post-election External Efficacy Using Pre-Election Thermometer Ratings of Candidates (1996 ANES)+, ++

Predictor	Coefficients from Single Predictor Regressions	Coefficients from Multivariate Regressions	Coefficients from Multivariate Regressions
External efficacy (pre-election)		.42**	.42**
Turnout	.11**	.08*	.04
Clinton feeling therm minus Dole feeling therm (pre-election)	.00	.00	.00*

Turnout*Preference	.04**		.05
Pocketbook economy (pre-election)	.13**	.02	.01
Sociotropic economy (pre-election)	.13**	.12*	.09*
Campaign participation (post-election)	.04	.00	.00
Regular discussion of politics (post-election)	.08**	.03	.01
Party identification (pre-election)	.01	-.02	.00
Newspaper and TV attention * exposure (post-election)	.20**	.06	.04
Gender		.00	.00
White		-.05	-.03
Non-white, Non-black		-.07	-.06
Annual income between \$10,000 and \$21,999		-.02	-.02
Annual income between \$22,000 and \$44,999		-.01	-.02
Annual income above \$45,000		.00	.01
No reported income		-.04	-.06
High school degree		.04	.02
Some college		.03	.02
College degree		.09*	.08*
Postgraduate degree		.11*	.10*
No reported education		.04	.08
Age		.00*	.00*
N		1469	1277

+This model was also estimated including age squared as a predictor, which was not significant.

++Ns for the equation using simple predictors ranged from 1277 to 1524.

*Statistically significant at the 5% level.

**Statistically significant at the 1% level.

Table 11: Regressions Predicting Post-election External Efficacy Using Post-Election Thermometer Ratings of Candidates (1996 ANES)+, ++

Predictor	Coefficients from Single Predictor Regressions	Coefficients from Multivariate Regressions	Coefficients from Multivariate Regressions
External efficacy (pre-election)		.43**	.43**
Turnout	.11**	.08**	.06
Clinton feeling therm minus Dole feeling therm (post-election)	.00	.00	.00
Turnout*Preference	.04**		.03
Pocketbook economy (pre-election)	.13**	.03	.02
Sociotropic economy (pre-election)	.13**	.11**	.09*
Campaign participation (post-election)	.04	.01	.00
Regular discussion of politics (post-election)	.08**	.03	.02
Party identification (pre-election)	.01	.00	.02
Newspaper and TV attention * exposure (post-election)	.20**	.07	.04
Gender		.00	.00
White		-.06**	-.04
Non-white, Non-black		-.08**	-.07
Annual income between \$10,000 and \$21,999		-.02	-.02
Annual income between \$22,000 and \$44,999		-.02	-.02

Annual income above \$45,000		.00	.01
No reported income		-.05	-.07
High school degree		.05*	.03
Some college		.04	.02
College degree		.10**	.09**
Postgraduate degree		.12**	.10**
No reported education		.06	.09
Age		.00*	.00*
N		1479	1281

+This model was also estimated including age squared as a predictor, which was not significant.

++Ns for the equation using simple predictors ranged from 1281 to 1524.

*Statistically significant at the 5% level.

**Statistically significant at the 1% level.

Table 12: Regressions Predicting Post-election External Efficacy Using Post-election Candidate Vote Choice (1996 ANES, Voters Only)+, ++

Predictor	Coefficients from Single Predictor Regressions	Coefficients from Multivariate Regressions
External efficacy (pre-election)		.43**
Candidate vote choice (post-election)	.01	.03
Pocketbook economy (pre-election)	.13**	.05
Sociotropic economy (pre-election)	.13**	.01
Campaign participation (post-election)	.04	.01
Regular discussion of politics (post-election)	.08**	.04

Party identification (pre-election)	.01	.03
Newspaper and TV attention * exposure (post-election)	.20**	.05
Gender		.01
White		-.03
Non-white, Non-black		-.05
Annual income between \$10,000 and \$21,999		-.04
Annual income between \$22,000 and \$44,999		-.01
Annual income above \$45,000		.01
No reported income		-.06
High school degree		.00
Some college		.00
College degree		.06
Postgraduate degree		.08
No reported education		.05
Age		.00
N		1019

+This model was also estimated including age squared as a predictor, which was not significant.

++Ns for the equation using simple predictors ranged from 1029 to 1524.

*Statistically significant at the 5% level.

**Statistically significant at the 1% level.

It is extremely interesting that voter turnout is a statistically significant predictor of positive change in efficacy between pre and post-election surveys in all single regressions. This result has not been frequently found in the literature. Clarke and Acock (1989) conclude that simply voting has no effect on feelings of efficacy,

and that instead efficacy only increases in people who vote for the winner. At least for external efficacy, the interaction between turnout and candidate choice seems to be real—but turnout is also important.

The single predictor regressions suggest that people who vote for the winner have a higher positive change in political efficacy, but people who vote for the loser still feel an increased sense of empowerment, if not as strong a change. This result makes theoretical sense as well: voters can self-identify as people likely to change the political system, even if their presidential candidate lost. This relationship could also be observed because of increased election noise. People who vote may also be more likely to pay attention to campaigns, which around election time are intended to empower voters and make them more likely to vote. In Table 13, however, absentee votes are shown alongside in person votes before and during the election. There is no statistical significance in efficacy change between the groups, decreasing the likelihood that the turnout relationship is observed because of campaign noise and not because of a real increase in efficacy because of voting.

Table 13: Change in Efficacy on Absentee Voting

	ANOVA
Change in Efficacy	
Absentee	.083
In person, before election	.029
In person, during election	.052
N	1,175

The fact that preferences and the interaction between preferences and voting are not statistically significant in 1996 casts down on the outside validity of previous theories about political efficacy that relied on results from 1984. Previous research has cited voting for the winner as the most important variable predicting post-election external efficacy. Instead, it appears that the act of voting itself is an important predictor, and that efficacy increases may not be dependent on voting for a winner but instead voting for a particular candidate. Using the same methodology but expanding research until 1996, we have shown how voting remains an important predictor but the influence of preferences on impacts depends on the candidates. Voting for Reagan may have significantly increased efficacy, but it does not appear that Clinton voters changed their beliefs about the political system with the same regularity.

Chapter 5: Conclusion

This paper has analyzed the factors that cause some people to become more empowered than others. The causes of political efficacy have been a continuous source of political psychology research for decades, but this analysis expands on the literature by using new measures of external and internal efficacy, comparing results in the 1996 American National Election Study to the 1984 results, and using a wide range of new predictors like including media exposure, civic duty, interest in government, and opinions about the state of the economy.

The main result is that in general people increase in external efficacy when they vote, not only when they vote for the winner. This result is far more robust to changes in specification than previous analyzes which did not control for factors fundamental to political efficacy like education. While people may increase in external efficacy more when they vote for the winner, this result was only found in 1984, and so may be specific to voting for certain candidates or in certain elections. As predicted by the efficacy literature, internal efficacy is a largely static measure that is not affected by voting or participation in political activities like discussing politics or giving to a campaign.

This paper also completes an important recent theoretical puzzle in rational choice theory. Bendor, Diermeier, and Ting (2003) sought to bridge the gap between rational choice theory and the empirical fact that many people vote by suggesting a model of adaptive rationality, where people repeat satisfactory actions and avoid unsatisfactory ones. However, their model assumed an individual's taste for voting was static and exogenous.

This analysis shows that the mechanism for adaptive rationality could be political efficacy. People's taste in voting can change based on their prior voting history and interest in government affairs. An individual may vote for a winning candidate in a given presidential election and increase in efficacy, thus increasing his "taste for voting" and the chance that he will vote in subsequent elections. Thus, better understanding how and why efficacy changes because of voting history could answer fundamental questions about why people vote in the first place.

Future research could expand on this analysis in many ways. One chief concern raised by the literature that has not been answering here is how long changes in efficacy last. The American National Election Study has a six week interval between pre and post election surveys—but how long does a change in external efficacy due to political participation last after an election? If people increase in efficacy because their favored candidate won, his subsequent behavior in office may erode their sense of external efficacy until the next election, which would affect the proposed mechanism for adaptive rationality.

More work is also needed on better defining questions that tap external and internal efficacy. This analysis showed that substantive results can change dramatically based on which questions are used to measure which constructs. Although there has been considerable work done in defining external and internal efficacy, this is one of the first papers to show how changing the questions used can

change the results. This underlines the need for survey questions that accurately tap these constructs.

Further work on efficacy research will likely require unique survey designs. The American National Election Study is ideally suited for this type of analysis that examines only the effect of elections and election related emotions and activities upon efficacy, but it cannot test the staying power of efficacy change or which non-electoral variables affect political efficacy. Research using well designed panel surveys or even experimental data could make major contributions to this area.

Bibliography

- Acock, A. & Clarke, H. D. (1990). Alternative measures of political efficacy: Models and means. *Quality and Quantity*, 24, 87-105.
- Acock, A., Clarke, H. D., & Stewart, M. C. (1985). A new model for old measures: A covariance structure analysis of political efficacy. *The Journal of Politics*, 47(4) 1062-1084.
- Bendor, J., Diermeier, D. & Ting, M. (2003). A behavioral model of turnout. *American Political Science Review*, 97, 261-280.
- Campbell, A., Gurin, G. & Miller, W. E. (1954). *The Voter Decides*. Evanston: Row, Peterson.
- Clarke, H. D., & Acock, A. C. (1989). National elections and political attitudes: The case of political efficacy. *British Journal of Political Science*, 19(4) 551-562.
- Craig, S. C., & Maggiotto, M. A. (1982). Measuring political efficacy. *Political Methodology*, 8, 85-109.
- Denny, K. & Doyle, O. (2006). How persistent is voting? Evidence from British panel data. Unpublished manuscript.
- Ferejohn, J. A., & Fiorina, M. P. (1974). The paradox of not voting: A decision theoretic analysis. *American Political Science Review*, 68(2), 525-536.
- Finkel, S. E. (1985). Reciprocal effects of participation and political efficacy: A panel analysis. *American Journal of Political Science*, 29(4) 891-913.
- Fowler, J. H. (2006). Habitual voting and behavioral turnout. *The Journal of Politics*, 68(2), 335-344.
- Gerber, A. S., Green, D. P., & Shachar, R. (2003). Voting may be habit forming: Events from a randomized field experiment." *American Journal of Political Science*, 47(3), 540-550.
- Green, D. P., & Shachar, R. (2000). Habit formation and political behaviour: Evidence of consuetude in voter turnout. *British Journal of Political Science*, 30(4), 561.
- Gilens, M., Glaser, J. & Mendelberg, T. (2001). Having a say: Political efficacy in the context of direct democracy. Presentation at the annual meeting of the American Political Science Association.
- Ginsberg, B. & Weissberg, R. (1978). Elections and the mobilization of popular support. *American Journal of Political Science*, 22(1) 31-55.
- Marcus, G. E., & MacKuen, M. B. (1993). Anxiety, enthusiasm, and the vote: The emotional underpinnings of learning and involvement in presidential campaigns. *American Political Science Review*, 87(3), 672-685.
- Meredith, M. (2006). Persistence in political participation. Presented at the 2006 Midwest Political Science Association Conference.
- Niemi, R. G., Craig, S. C., & Mattei, F. (1991). Measuring internal political efficacy in the 1988 National Election Study. *American Political Science Review*, 5(4), 1407-1413.

- Plutzer, E. (2002). Becoming a habitual voter: Inertia, resources, and growth into young adulthood. *American Political Science Review*, 96, 41-56.
- Riker, W. H., & Ordeshook, P. C. (1968). A theory of the calculus of voting. *The American Political Science Review*, 62(1), 25-42.
- Rudolph, T. J., Gangl, A., & Stevens, D. (2000). The effects of efficacy and emotions on campaign involvement. *Journal of Politics*, 62(4) 1198-1197.
- Stenner-Day, K. & Fischle, M. (1992). The effects of political participation on political efficacy: A simultaneous equations model. *Australian Journal of Political Science*, 27(2) 282-305.
- Stewart, M. C., Kornberg, A., Clarke, H. D., & Acock, A. (1992). Arenas and attitudes: A note on political efficacy in a federal system. *The Journal of Politics*, 54(1) 179-196.
- Yeich, S., & Levine, R. (1994). Political efficacy: Enhancing the construct and its relationship to mobilization of people. *Journal of Community Psychology*, 2, 259-271.