Can A Voter In New York Make A Candidate Lose in California? An Experimental Test of the Release of Early Election Results On Voter Turnout

Geoffrey D. Peterson
University of Wisconsin-Eau Claire

Introduction

At 7:48 p.m. Eastern time, the major news networks would make the first of several erroneous predictions. The results of their exit polling showed that Al Gore would win the state of Florida and the 2000 presidential election. While the battle over who the true winner of the state was would drag on for over a month, many political pundits and scholars raised serious questions regarding the release of the early election results. While there are certainly no clear answers at this point, the question is surely one that merits debate.

The focus of this controversy is what is often referred to as the West Coast effect. The West Coast effect is defined as the impact of the release of early election returns from the East Coast before the polls on the West Coast close. Potential voters on the West Coast gain access to new information about the developing election through the media, and this information changes their intended behavior. Access to the information may encourage or discourage voters from going to the polls, depending on which candidate they support and the content of the information they have received.

In essence, the debate surrounding the West Coast effect is a question regarding the introduction of information. There is little question that the introduction of new information can change political behavior. While the effect of the information can be moderated or exacerbated by outside forces, and the impact of the information may not be visible under certain
circumstances, the new information remains a potential catalyst for behavioral change depending on the strength of the novelty. While it is difficult to find real-world situations in which the impact of new information can be accurately gauged, one is the West Coast effect.

The story surrounding the West Coast effect is an interesting one for both political science and political practitioners. If access to election-day information can alter voting behavior, it must be considered by political scientists attempting to explain and predict turnout in national elections. In addition, the West Coast effect has implications for students of the democratic process, the First Amendment, and the press. For practitioners of politics, this knowledge could, for example, alter which states are targeted in the last days of a presidential campaign. Since the early 1960s, politicians, political scientists, pollsters, and pundits have debated the potential impact of the West Coast effect. The debate over whether to limit media broadcasting of election results to minimize the West Coast effect in close elections resulted in hearings in the Senate Subcommittee on Communications in 1967, the House Committee on Energy and Commerce in 2001, and hearings by the Federal Communications Commission on several occasions.

Although widely debated, the issue itself is often viewed as esoteric and abstract by the general public. In order to put the controversy in more concrete terms, the issue is often framed in the form of a story about an individual voter. A mid-level manager is on her way home from work on election day in California. She had intended to vote all along, but her day had been busy and she had not found the time. As she begins the drive home, she turns on the radio in her car and hears that the presidential candidate she had intended to vote for has just conceded the election to his opponent on the basis of the early election returns from the East Coast. Realizing that she no longer has any hope whatsoever of altering the presidential election outcome, she decides not to vote and chooses to go home. When thousands of other members of her party choose to do so as well, several statewide

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1 This story is a combination of several examples discussed in the hearings of the 90th Senate collectively called the “Predictions of Election Results and Political Broadcasting,” S1824-4 in 1967.
elections are altered by the depressed turnout among supporters of the losing presidential candidate’s party.

While apocryphal, this story presents the essential features of the West Coast effect. The introduction of new information to the electorate, the results of the East Coast voting, alters voting behavior on the West Coast. Since the presidential election outcome is already a foregone conclusion, the impact of decreased turnout is primarily felt among those running in state and sub-national elections on the West Coast. Candidates for sub-national elections may find themselves at the mercy of the presidential election outcomes, and they may well win or lose based on the result of the national election rather than the merits of their individual campaigns.

What Do We Know? The History and Literature Surrounding the West Coast Effect.

The potential impact of reporting early election returns has been debated since the early 1960s. With the combination of sophisticated computer models and dramatic improvements in survey techniques, it became possible for the major news organizations to predict the election results with only a fraction of all of the votes in the state counted. When the networks announced they would release East Coast election predictions before the polls closed on the West Coast, politicians and pundits began to question the impact of this information on the West Coast residents. Many predicted dramatic decreases in turnout, believing West Coast voters would choose to stay home in droves if they believed their votes could not alter the eventual outcome of the election. Others predicted more modest impacts, but the clear consensus was the information would cause turnout to decline.

The concern about the potential impact of these returns eventually became so great that the Senate Subcommittee on Communications held hearings in 1967 to discuss their potential
impact\textsuperscript{2}. Since there had been no systematic examination regarding the impact of this new technology, several political scientists set out to study the impact of the early returns on West Coast voting behavior in the 1964 presidential election.

\textbf{The West Coast Effect and the Election of 1964.}

The outcome of the election of 1964 generated little controversy. When Senator Barry Goldwater won the Republican nomination, he immediately found himself trailing incumbent Democrat Lyndon Johnson by double digits. Over the months leading up to the election, Goldwater would find himself consistently trailing Johnson by ever-widening margins, and the results of the election only confirmed the Johnson landslide the opinion polls had predicted for several months.

Three major surveys were conducted during and after the 1964 election to determine what impact, if any, the early election returns had on voting behavior on the West Coast (Fuchs, 1966; Mendelsohn, 1966; Lang & Lang, 1968). These studies provided the first objective measures of the West Coast effect. Both Mendelsohn (1966) and Fuchs (1966) used pre- and post- election surveys on the West Coast. Both authors attempted to contact voters a few days before and a few days after the election. Mendelsohn was interested primarily in voters who switched candidates after hearing the returns, but he found little evidence to support this possibility. Both authors concluded that turnout levels changed very little (if at all) due to access to the early results.

Substantial methodological problems in both studies raised serious questions about the validity of these conclusions. In Fuchs’ survey, he found that 92\% of the persons surveyed in California reported voting in the 1964 election. While it is possible the survey process randomly

\textsuperscript{2} Among those called to testify was Prof. Warren Miller, who argued there was little significant impact on West
selected a large number of actual voters, it is also true that these turnout numbers are dramatically higher than the overall turnout for the counties in which the respondents resided (Dubois, 1983). If the voters in Fuchs’ survey were either deceptive or inaccurate in their answers to the voting questions on a regular basis, the inference the returns had little impact must be called into question.\(^3\)

In Mendelsohn’s survey, the pool of potential respondents was chosen from the voter registration lists from the 1960 election in California. Since previous registration status is the single-best predictor of likelihood to vote (Erikson, 1981), it should come as no surprise that Mendelsohn found little decrease in turnout. Previously registered voters also are more likely to be members of political parties and have stronger partisan leanings, both of which are factors that increase the likelihood of voting and decrease the likelihood of switching candidates. In using the 1960 registration lists, Mendelsohn also ignored all Californians who came of voting age between 1960 and 1964.

Finally, both authors ignore a central question surrounding the West Coast effect, the question of sub-national election outcomes. Even if the release of East Coast returns lowers turnout on the West Coast, the impact would be minimal at both national and sub-national levels if turnout decreases proportionally among both Democrats and Republicans\(^4\). It is when turnout decreases disproportionally for one of the two parties that the impact is felt on sub-national elections. Both Fuchs and Mendelsohn spend little time examining this question, and their results are sparse and inconclusive.

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3 This problem (over-reporting of turnout) has been found in most surveys in which vote validation (verifying the vote reports through the voter registrations lists) was not used.
The third study of the 1964 election was Lang and Lang’s book *Voting and Nonvoting: Implications of Broadcasting Returns Before Polls Are Closed* (1968). More far-reaching than the Fuchs or Mendelsohn studies, the Lang study was considered the definitive study of the West Coast effect for over a decade. Lang and Lang provided a lengthy discussion and analysis of the West Coast effect and concluded it was a creation of the media rather than fact.

However, Lang and Lang’s results were inconclusive. The survey was limited to one community on the entire West Coast (in Oakland county), and the numbers surveyed (438) resulted large margins of error for the survey. After eliminating those surveyed who voted before the returns were announced, Lang and Lang were left with slightly more than one hundred individuals on which to base their entire analysis.

There is another factor that may have dramatically biased the results of all three analyses. The election result for 1964 was, for most potential voters, a foregone conclusion. At no point during the presidential campaign did Goldwater get close to Johnson. As the election neared, poll after poll showed clearly that Johnson would win by a substantial margin. The logic behind the West Coast effect is that access to new information from the early election returns alters voting behavior. In the 1964 election, the returns from the East Coast provided West Coast voters with no new information. Polls had predicted for weeks that Johnson would win the election, and the early returns only confirmed these predictions. If Goldwater supporters decided not to vote based on the low probability their favored candidate would win the election, it is impossible to determine whether they made their decision based on the election day results or on the multitude of polls that provided the same information in the months prior to the election.

4 In other words, if the West Coast effect decreases turnout proportionally for both parties, the state and local election outcomes do not change. Candidates who would win without the returns would still win with the returns present.
All three studies of the 1964 assume the decision whether or not to vote would be made on election day itself, but this assumption is seriously in error. If the pre-election polls induced West Coast voters to stay home before election day, the release of East Coast election returns that only verified their previous predictions should have little impact on their final decisions. The election day returns are not new information for these potential voters, and it should come as no surprise that access to this information had little impact on the overall turnout levels. In fact, the only situation in which the East Coast returns would have provided new information would have been if Goldwater had won in states he was predicted to lose, thus providing West Coast citizens with unexpected information about the election in progress.

The particulars of the 1964 presidential campaign substantially invalidated all three studies. Since it is impossible to separate the effects of the pre-election polls and the election day returns, the causal connection is, if not completely disrupted, dangerously muddied. Even if the authors had avoided the other methodological problems present in their studies, the nature of the election they chose to study leaves the question of the West Coast effect open to further investigation.

The Second Wave: The Election of 1980

In the early 1980s, political scientists began to reexamine the West Coast effect in a new light. Between 1981 and 1983, five separate studies of the West Coast effect appeared in political science and public opinion journals assessing the effect of early election returns on West Coast voting behavior. While the elections of 1972 and 1976 had generated little controversy regarding the release of early election returns, the election of 1980 proved to be a different sort.

The election of 1980 is one in which the West Coast effect seems, on the surface, more likely to appear. Although Carter trailed in many of the polls leading up to election day, the
difference between Carter and Reagan fell within the margin of error of many the surveys, thus putting Carter and Reagan in a statistical dead heat (Delli Carpini, 1984; Jackson, 1983). Since pre-election polls told the voters the election would be close, the Reagan landslide on election day was unexpected. When the landslide began on the East Coast, there was widespread surprise among pundits (Epstein & Strom, 1981), and there was likely to be surprise among West Coast voters. In addition, incumbent President Carter conceded the election at 6:01 PM on the East Coast, which was 3 PM in the afternoon on the West Coast. If West Coast voters expected the election to be close, the early election returns and Carter’s early concession speech were new and potentially important pieces of information.

If there was one clear problem in the earlier studies according to researchers in the early eighties, it was the lack of a sufficient data pool from which to draw significant conclusions. To alleviate this problem, three of the five studies (Delli Carpini, 1984; Dubois, 1983; Epstein & Strom, 1981) used aggregate data rather than surveys, while the other, (Jackson, 1983), used a much larger survey.

Three of the five studies use aggregate data to examine the election of 1980, Epstein and Strom (1981), Dubois (1983), and Delli Carpini (1984). In addition, all three studies calculate changes in aggregate turnout levels by comparing elections in which early returns were released before the polls closed (e.g. 1964, 1972) to elections in which the results were not released until after West Coast polls closed (e.g. 1968).

Although similar temporally and in basic methodology, the three studies differ in several details. Epstein and Strom (1981) use regional turnout data (West Coast, Pacific Northwest, Rocky Mountains states, etc.), arguing it is more accurate than the limited surveys used in previous research. Dubois (1983) uses state level turnout, claiming it is more accurate than the
regional data of Epstein and Strom. Delli Carpini (1984) uses congressional districts, claiming a substantial improvement over the state level data used by Dubois (1983). In each case, the change in level of analysis was justified as an improvement over previous research.

The results of the studies were inconclusive. Epstein and Strom found little impact on overall turnout. Dubois found a decrease in West Coast turnout, but argued this was a unique effect of the 1980 election. Delli Carpini found a drop in turnout of a similar magnitude as Dubois, but in different areas of the West Coast. The end results are three studies that contradict each other. Although Delli Carpini and Dubois agree turnout decreased, they disagree about what areas of the West Coast showed the decrease.

Although the differences in the results are troublesome, a far more prominent issue is ignored. Each of these studies fail to address the issue of information access. Although the level of analysis changes, the data are unable to discriminate between those voters who had access to the information and those that did not. Once again, the causal linkage is broken- without knowing which of the West Coast voters had access to the early election returns, it becomes impossible to make a causal statement about the effect of the early election returns.

Of all of the studies of the 1980 election, only the research of Jackson (1983) addresses the causal connection between information access and voter turnout. Jackson used questions from the University of Michigan’s Presidential Election Study and from the Vote Validation Study by the Center for Political Studies. Combining these resources, Jackson was able to create a pool of 1814 persons who were interviewed both before and after the election. Using logit analysis, Jackson found that the combination of access to early election returns and hearing Carter’s concession speech reduced turnout between six and twelve percent. There was little evidence, however, that either party was disproportionally affected.
Although Jackson’s survey solves the causal problems inherent in the other studies of the 1980 election, several methodological and statistical errors decrease confidence in the results. The methodological errors occur at two points in the analysis: the coding process and the case-selection process (Epstein & Strom, 1984). One of several examples of these methodological errors is that Jackson assumes all polls closed at 8 PM local time, an assumption that is incorrect for a majority of the states in the study\(^5\). The case selection process in Jackson’s analysis is also unclear and potentially arbitrary. The final survey pool in his analysis included 1123 respondents, yet Jackson never explains why nearly 800 of those in the original survey from the University of Michigan were excluded (Epstein & Strom, 1984).

Finally, there are some potential statistical errors that may weaken the conclusions of Jackson’s research. Jackson uses the results of the survey to predict the likelihood an individual will vote, and then uses these projections to project turnout. Projections based on projections are potentially dangerous statistically. If there is error in the initial model, this error will be magnified by the further projections. Although Jackson does not present the overall standard error for the likelihood model, the errors for the individual probit coefficients are substantial\(^6\). If these errors are compounded in the second prediction model, it becomes very difficult to determine the true parameters of the variables he is attempting to predict.

**The 2000 Election**

After the controversies surrounding the 1980 election announcements, debate over the impact of the early poll releases died down. While some efforts were made to establish consistent

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\(^5\) This error is particularly troublesome when one considers that several sources of data are easily available to provide accurate poll closing times.

\(^6\) In Jackson’s defense, one must acknowledge that most statistical analyses of survey data produce substantial error coefficients, so this is not a problem unique to this survey. This should be interpreted as a caution to all researchers who use survey data in multiple projections.
poll closing times, these were met with little interest. After the controversy in Florida, the level of interest would rise dramatically.

While the Florida recount was certainly the focus of the media coverage after the 2000 election, there was some debate regarding the release of early election returns. This debate centered on the fact that the Panhandle region of Florida was in a different time zone than the rest of Florida. When Florida was first declared for Gore at 7:48 eastern time, the polls in the Panhandle were still technically open for another twelve minutes. While scholars tend argue this had little or no impact on the eventual outcome of the election (Sobel & Lawson, 2002; Alter, 2003), it nevertheless brought the issue of early election results back into the political debate.

The Current State of the Research

Despite multiple surveys and aggregate analyses, the impact of early election returns remains surprisingly elusive. Some authors found declines in turnout (Delli Carpini, 1984; Dubois, 1983; Jackson, 1983), while others found little or no effect (Epstein & Strom, 1984; Epstein & Strom, 1981; Fuchs, 1966; Mendelsohn, 1966). The differences in these conclusions appear to be independent of the election studied, the data used, or the statistical method employed.

In addition to the inconclusive results, there is a surprising failure on the part of several of these studies to address the critical underlying questions about the West Coast effect. Nearly all of the studies ignore the question of information access altogether, assuming (apparently) that all West Coast voters had access to the information. This is a serious misjudgment on the part of these authors. The access to the information is the causal link between the release of election returns and the decrease in turnout. If the researcher cannot control for which voters had access
to the results and which did not, the causal link is broken and the subsequent analysis is an exercise in futility.

Another dramatic failure in most of the current literature is the failure to address the question of the impact of the West Coast effect on state and sub-national elections. The controversy surrounding the West Coast effect has always been whether or not the returns have an impact on sub-national elections. Concern about the impact on national turnout levels has rarely been raised as a major topic of debate. Measuring the impact on sub-national elections is extremely difficult and time-consuming. Thus, examining the impact on the parties provides an acceptable substitute. If the early returns alter overall turnout without disproportionally impacting one party over another, the impact of the West Coast effect is nil. If the returns alter turnout more for one party than the other on the West Coast, sub-national elections on the West Coast should be affected as well.

In either case, all of the research on the West Coast effect either ignores the question of sub-national elections or gives it only cursory discussion. This is surprising, considering sub-national elections are those most likely to be affected and those where the impact would be most pronounced. While this omission on the part of previous researchers is not fatal to the general line of research, it distorts the underlying questions of the West Coast effect.

**Normative Implications of the West Coast Effect**

The West Coast effect has the potential to be a substantial force in electoral process. If access to the early election information changes turnout on the West Coast, it could change which party controls Congress, West Coast state legislatures, or governors’ offices. These possibilities raise serious questions about both the democratic process and the First Amendment.
On one side of the argument are the news media. Within the media, the right to a free press as defined by the Constitution is considered sacrosanct. If the information is available, the press has the right to release it to the public (Delli Carpini, 1984; Jackson, 1983). Some members of the media go so far as to argue they have an obligation to report the information. In either case, supporters of the press claim the West Coast effect is not a problem within their control. How people use the information provided by the media should not be a concern for journalists--the messenger should not be punished for the message.

On the other side of the argument are those who believe the early returns bias the results of elections. As Senator Jacob Javits pointedly discussed during the Senate’s 1967 hearings on the West Coast effect, if the results of the East Coast elections encourage West Coast voters not to vote, it is an apparent violation of the principle of “one person, one vote.” West Coast voters are being told, in effect, that their votes in the presidential election do not matter--the East Coast has already decided the election for you. Research has consistently shown that most citizens are primarily interested in the outcome of the presidential election, and their interest in sub-national elections rarely equals that of the race for the White House. With their primary source of interest removed by the East Coast voters West Coast voters may stay home rather than voting.

It is important to recognize that the impact of the West Coast effect does not have to be very large to alter the outcome of sub-national elections. If only one percent of the supporters for a given candidate chose not to vote based on East Coast returns, the outcome of sub-national elections could be altered. In districts with close elections, the West Coast effect could have been responsible for turning the election to the eventual winner. If the West Coast effect exists, it does not need to have an enormous impact in raw numbers to have a substantial effect on election outcomes.
One interesting irony of the West Coast effect is the paradoxical relationship between the media and the voters. All things being equal, it is easier for network pollsters to forecast the outcome of a blowout election than a close one—the results are more clear-cut, thus reducing the amount of error in the prediction. At the same time, blowout predictions are only informative for citizens if the blowout itself is unexpected, as in the election of 1980. If the blowout is expected, as in 1964 or 1972, the predictions provide only confirmatory evidence. If the election is too close to call on election day, the early election returns are far more valuable to the voters, yet accurate predictions are much more difficult to make when the results are close.

The West Coast effect remains, in many ways, an enigma in politics. Previous research has been inconclusive, and there has been little in the way of solid theoretical grounding. A central issue, the potential impact of early election information on sub-national elections, has been largely ignored. The West Coast effect is largely unexplained despite its potential to have a significant impact on the process of governance. Given the controversy surrounding the 2000 presidential election, it is clearly an area in need of further study.

**Information and Its Impact on Voting: The West Coast Effect**

Can access to early election information alter voting behavior? While this question is still under debate, there is agreement that if the information does have an impact, it has the potential to alter both parts of the voting decision: whether or not to vote, and which candidate to support. For this research, the focus will be on whether or not to vote. Although the question of vote choice is equally interesting, it serves little purpose to try to predict changes in vote choice if the probability of voting is unknown.

If the early election return information changes the probability of voting, which direction does it take? If a supporter of one party sees that the presidential candidate he supports has
already won or lost the national election, he may choose to stay home. The vote would have a zero probability of affecting the outcome of the national election, so he chooses to save himself the time and effort associated with going to the polls. This is the argument most often used in the public debates surrounding the West Coast effect, and the argument used to try to limit the ability of the news media to release early election results. This declining turnout argument assumes that many potential voters only go to the polls when they believe their vote can make a difference in the election outcome, or that the benefits of voting in a foregone election still outweigh the costs of voting.

It is also possible that early election return information raises the probability of voting by providing a very different picture of the election. If potential West Coast voters get access to the early East Coast returns and the East Coast totals are extremely close, the voters on the West Coast are allowed, in essence, to decide the outcome of the election. If East Coast voters tie, their votes are essentially meaningless when determining the outcome of the election, which gives the West Coast voters complete control over which candidate wins the election. If the West Coast voters comprehend this potential power, they have a stronger incentive to vote.

**An Experimental Design to Test the West Coast Effect**

The primary goal of experimental design is to eliminate confounding external influences on behavior by controlling the environment and individuals within the confines of the experimental setting. The amount of environmental background noise in any election can make the causal linkages extremely difficult to discern. While statistical methods have been developed to aid survey researchers in grappling with causality, even the most ardent survey statistician knows that advanced statistical techniques are no substitute for direct manipulation of the subjects and their environment. Through regulation over the environment and the randomization
of subjects, experimental research gains a degree of control greater than any survey design could hope to achieve. Experimental designs allow researchers to test the causal impact of a single factor. Through careful measurement of behavior before and after this factor is introduced, it is possible to measure its effect great accuracy. By removing exogenous factors from the pool of possible explanations for observed behaviors, the hypothesized causal linkages become more easily testable.

The central questions in the West Coast effect are whether access to early election returns can change voting behavior, and if so, in all elections or only in those too close to call? These questions will be answered using two separate experimental designs. In both cases, the answer revolves around changes in voting patterns over the course of the experiments.

Gauging changes in voting patterns requires both control and treatment measurements. The control measure determines the baseline voting patterns for the participants when none of them have access to the information. The treatment level provides a measure of voting change when the treatment, access to early election returns, is introduced. If consistent changes are observed among the participants who receive the information while those who do not receive the information show little or no change, one may infer the change in voting behavior is caused by the information.

**First Experimental Design**

In the first experimental design, the goal was to replicate elections in which the voters were unsure of the election outcome going into the day of the election. To best replicate the process of the West Coast effect, the participants in the experiment would need to be exposed to early election returns in some cases and not in others. In addition, they would need to believe that the results from the “East Coast” were close in some cases and not in others. To create a
reasonable approximation of this process, the participants were randomly assigned to support a hypothetical candidate (either Orange or Green) in each simulated election. This support was varied from one election to the next.

In addition to supporting different candidates, the experiment needed to simulate the difference between those voters who had access to the early election returns and those that did not. To do this, the participants were randomly assigned to information groups. In each simulated election, those in the first information group received the results of the East Coast elections, while those in the second information group did not. All of the results from the “East Coast” voting were generated in advance of the experiment, but the participants were told that another group was voting in a nearby room just before the real participants were given the opportunity to vote.

In all of the elections in the experiment, there were equal numbers of participants assigned to both information groups (14), and equal numbers of participants supported each candidate (14), although which candidate was supported by each individual participant varied with each election. Each participant knew the number of supporters for each candidate in their group as well as the breakdown in the other group.

Since the candidates in the experiments are generic color names with no partisan identification, it would be unreasonable to expect the participants to vote without some other form of enticement. With no partisan affiliation or other methods of traditional political engagement available to motivate them, some other form of incentive is required. The most widely accepted substitute for personal political engagement in experimental research is avarice (Kinder & Palfrey, 1993; Davis & Holt, 1993; Kirk, 1982). Avarice may not be a perfect substitute for political engagement, but it is an important influence on the actual behavior of
voters in the real world (Lewis-Beck, 1985). While substituting avarice for political engagement may affect those few individuals that are willing to sacrifice their personal welfare for the good of society, it should be a suitable motivational substitute for a vast majority of the participants. To generate this avarice, the participants were told that if their preferred candidate won, they would receive $1, whereas if their preferred candidate lost, they would only receive $0.50. The participants were also assessed a voting cost of $0.10 to simulate the time and energy involved in voting.

The use of randomization mitigated any attempts by the participants to coordinate their activities as well as assuring anonymity among the participants. If the participants could accurately predict which candidate they would prefer before each election, it would be relatively easy for them to tacitly agree as a group that one candidate should consistently win every election. This would allow them to avoid most potential voting costs and ensure all participants receive the same payoffs at the end of the experiment. Random assignment of participant preferences alleviated these effects by reducing the level of certainty for their predictions about preference distributions. While the average proportion of candidate support with two candidates was 50-50 across all participants, the use of random assignment meant that any individual participant is not guaranteed such a proportion. It is this possibility that encourages participants to remain within the experimental structure, allowing the causality tests to remain believable.

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7 This “super-game” effect is possible even if the participants can accurately predict the proportion of times they will support either candidate without predicting which candidate they will support in any given election. For example, if the participants know with certainty they will support one candidate fifty percent of the time and the other candidate fifty percent of the time, they can tacitly agree to allow each candidate to win fifty percent of the elections, maximizing their overall payoffs.
The overall experimental process consisted of four phases, each designed to test a different level of information access. Each phase consisted of six simulated elections. In each simulated election, random results were generated for the “East Coast” voters. These vote totals were combined with the actual votes taken by the experimental participants to determine an overall election winner.

**Phase One**

The first phase of the experiment was the control phase. Participants in the experiment were randomly assigned a candidate to support but none of the participants were given any information about the East Coast results. The candidate that received the most votes of the combined totals from the fictitious East Coast voters and the participants won. Since none of the participants knew the results of the election until voting was completed, this phase essentially replicated a national voting process when early election returns are unavailable, such as the midterm elections for Congress.

**Phase Two**

The second phase of the experiment introduced information at the most basic level. During the second phase, all participants were provided with the results of the fictitious voting on the East Coast before voting. By providing the information to all participants, we established a baseline for how the participants acted with access to the information. Since all of the participants had access to the information, any change observed between the first and second phases was a result of the introduction of the information. This phase did not directly replicate any real-world situation, rather it provided a transition from phase one to phase three.

**Phase Three**
The third phase of the experiment introduced random access to information. During the third phase, half of the participants that supported the Orange candidate and half of the participants that supported the Green candidate received the results of fictitious East Coast voting, while the other participants received no information. Who had access to the information was randomly assigned at the beginning of each election, guaranteeing that no one participant would always have access to the East Coast returns. This phase provided the most direct replication of the West Coast effect. During real-world presidential elections, not all residents of the West Coast hear the results of the early voting before they go to the polls. Random access to the information among the participants tested this access effect in the laboratory setting.

**Phase Four**

The fourth and final phase of the experiment repeated the first phase. In the fourth phase, the participants did not receive any information about the voting from the East Coast. The purpose of replicating the first phase was to measure the degree of learning that occurred over the course of the experiment. If the participants established a super-game pattern of alternating voting and non-voting, the results of the voting in the fourth phase should be significantly different from the voting in the first phase.

Every effort was made to make each phase procedurally identical to the others. The forms were picked up in the same order each time, and all participants were provided with information sheets after the first group voted. When com

**Second Experimental Design**

The second experiment further tested the West Coast effect and the question of election closeness. Following the same basic processes established in the first experiment, the purpose of the second experiment was to determine if the West Coast effect occurs when the participants
can be more confident in their expectations about the outcome of the in advance of the election itself.

To create a situation in which the outcome of the election could be predicted in advance, the distribution of the voters was altered from the first experiment. Rather than having an equal number of participants supporting each candidate (14 for each), the voters were distributed to give one candidate a majority of the potential support in each election. In each election, sixteen of the twenty-eight participants supported one candidate (57%), while twelve of the twenty-eight supported the other (43%). Which candidate was supported by the majority of the participants was randomly determined for each election.

If the West Coast effect only exists when the information about the election is new or unusual, the only time the information should have any impact in this design is when the minority candidate wins or ties in the vote totals from the fictitious East Coast, which would be an unexpected outcome. In any election in which the majority candidate wins the East Coast, the information about that outcome is not new for the experimental participants, but merely confirms the expected outcome. Thus, when the majority candidate wins the East Coast, the introduction of the information should have no significant effect on the behavior of the participants in the experiment.

With this design, it was possible to make comparisons both within and between the phases. The changes in information levels between the phases provided inter-group controls for access to information. In addition, the use of random assignment controlled for any individual behavioral effects that emerged in the course of the experiment.
First Experimental Run

All of the participants in the experiment were students in the business college at the University of Iowa. After all of the instructions were read and all questions answered, the participants were instructed to open their experimental binders to the beginning of Phase One. The specific instructions for each phase were read out loud, and the participants were instructed to proceed to the first election. The procedures followed the description of the four phases listed above.

When all twenty-four of the elections were complete, the participants were asked to complete the post-experimental questionnaire. While the participants filled out the questionnaire, they were asked to come to the front of the room individually to compare the payoff total they had reached with the total recorded by the experimenter. The participants were paid in cash when the payoffs were verified. After the participants were paid and had completed the questionnaire, they were free to leave.

Second Experimental Run

All of the participants in the second experiment were drawn from introductory political science courses at the University of Iowa. The pre-experimental processes repeated the first experiment in every respect. The design of the second experiment follows most of the structure of the first experiment, although the purpose was slightly different. As noted earlier, the goal of the second experiment was to determine whether or not the West Coast effect existed when the outcome of the election was more certain before voting commenced. This experiment was designed to replicate the circumstances of the Lang and Lang (1968) study of the 1964 election in which pre-election polling data allowed the voters to make accurate predictions about the election outcome before the actual ballot counting took place.
Hypotheses

*Hypothesis One:* Access to early election returns will only alter voting behavior when the information either contradicts previous expectations about the election outcome or provides information about the election where none was previously available.

Within the experimental design, the participants will have believable information about the potential election outcomes. In the first experiment, the voters will know the result of the election is uncertain. They will know the breakdown of the overall preferences is 50/50 between the two candidates before each election begins. Access to information should always be valuable in the first experiment to the voters.

In the second experiment, the participants will know one candidate will always hold an outright majority of the preferences before the election begins. Access to the information should be most valuable when it contradicts the previous expectations, such as discovering the minority candidate is winning the election. Confirmation of those expectations should have little impact on voting.

*Hypothesis Two:* The impact of the information on turnout in participants will be causally related to the vote margin from the fictitious East Coast results.

If the West Coast effect alters voter calculus, it alters the probability portion of the equation. The information provided to the potential voter gives more information about the likelihood of casting the deciding ballot. If a participant in the second group learns the vote margin on the East Coast was zero (a tie), the participant should realize the outcome of the election will be determined by the voting among the experimental participants, thus increasing the probability of casting the deciding vote. Conversely, if the participant learns one candidate
holds a large lead after the voting on the East Coast, the probability of his/her vote altering the outcome decreases, and that knowledge should be reflected in decreased turnout.

**Hypothesis Three:** Access to information will affect the supports of both the winning and losing candidates equally.

Expected utility theory provides the basis for this hypothesis. Under expected utility theory, the direction of the information should not matter in determining its impact (Raffia, 1968). If the participants find out one candidate won the voting on the East Coast by a large margin, the supporters of the winning candidate should abstain at a rate equal to the supporters of the losing candidate. The “winners” should not vote because their candidate has already won, thus any additional votes are unnecessary. The “losers” should not vote because the probability the losing candidate will catch up is small. While turnout may decrease, it should do so proportionally for both groups.

**Hypothesis Four:** Access to early election returns will have a greater impact on the supporters of the losing candidate than on the supporters of the winning.

Psychological research has shown that individuals are generally more sensitive to potential losses than to potential gains (Quattrone & Tversky, 1989). Supporters of the winning candidate should continue to vote even if the information is provided, perhaps out of a sense of unity or out of fear of a last-minute defeat. Supporters of the losing candidate should be much less likely to vote when information is present, seeing imminent defeat as the most likely outcome.

The experimental procedures outlined test two different questions surrounding the West Coast effect: does the access to early election returns alter voting patterns, and is the West Coast effect mitigated when the outcome of the election appears to be certain before the election
begins? Through the use of carefully controlled experimental procedures, including the random assignment of participants between groups, it will be possible to directly examine the impact of the information on the voting behavior of the participants in the experiment.

EXPERIMENTAL RESULTS

The West Coast Effect

The best test of the impact of information on voting behavior is in the third phase. In phase three, one half of the participants were randomly chosen to receive the information while half did not. Figure 1 shows the differences in turnout between informed and uninformed participants. The average turnout for the informed participants was 31.2%, while it was 71.5% for the uninformed participants in (t=-4.68, p<0.005).
The results of the experiment demonstrate the influence of information on voting behavior. Informed participants were dramatically less likely to vote than uninformed participants across all of the simulated elections.

What about differential effects? Many pundits and theorists argue that voters who support the candidate that loses on the East Coast are less likely to vote than those who support the candidate that wins the East Coast. Others argue that supporters of the winning candidate may be less likely to vote, believing their preferred candidate has already won and that their additional votes are not needed.

Under expected utility theory, the direction of the information (your favored candidate is winning vs. your favored candidate is losing) should have no effect on the impact of the information. If prospect theory is correct, the negative information (your favored candidate is
losing) should have a greater impact than the positive information (your favored candidate is winning). To examine this possibility, we need to look at the behavior of the informed participants. Since these participants know the results of the voting from the East Coast, they know whether or not the candidate they support won in the first round of voting. Figure 2 shows the differences between the “winners” and the “losers” in the third phase.

Figure 2: Comparison of Informed Voters By Results for Supported Candidate.

The data clearly support prospect theory over expected utility theory. In all of the elections, informed participants who supported the losing candidate voted at lower levels than those who supported the winning candidate ($t=-3.75$, $p<0.033$). Informed turnout for the winning candidate was 43.8% and 8.3% for the losing candidate. In three of the six elections,
not even one of the supporters of the losing candidate bothered to vote after receiving the results of the fictitious East Coast voting.

What is the overall impact of the information on turnout on the participants? Turnout for all uninformed participants in the second group was 57.9% across all phases, compared to 38.8% for all informed participants in phases two and three (t=-2.78, p>0.009). On average, access to information reduced turnout by 19.1% among the participants. In addition, if the favored candidate lost on the East Coast, mean turnout dropped to a paltry 8.3% among the informed participants who favored the losing candidate (t=-5.28, p>0.001).

The results of the experiment demonstrate the strength of the West Coast effect in the laboratory setting. Participants who had access to the early election returns were significantly and consistently more likely to abstain than uninformed participants in the same election. The results clearly demonstrate the impact of the West Coast effect on the overall turnout levels within elections.

The results of the first experiment demonstrate the West Coast effect exists. This experiment, however, only addresses part of the West Coast effect. In this experiment, all of the voters knew there were equal numbers of supporters for both candidates, making the overall election too close to call. While this has been the case in some recent presidential elections, most of the elections in the past thirty years have not been close. To test the impact of the presence of a clear front-runner on the West Coast effect, a second experiment was run.

The Second Experiment: Introducing Clear Majorities

It may not be entirely surprising to find that information can alter turnout levels when an election is too close to call on election day. Voters who have a stake in the outcome of the election would find information about early results useful when deciding whether or not to vote.
But is the same information as valuable to the voter when pre-election information shows one candidate has a large lead over the other?

The value of the information under these circumstances is dependent on what the information conveys. If the information provided to the West Coast voters confirms the majority candidate is winning, it is not new information, only information that verifies previously held expectations. While confirmatory information has some value, it is unlikely to cause voters to suddenly alter their behavior patterns. If the information provided shows the minority candidate is winning on the East Coast, then it is new information, as it directly contradicts the voters’ expectations. With this new information, supporters of the minority candidate may choose to participate, suddenly realizing their candidate has a chance to win the election. Supporters of the majority candidate may abstain in greater numbers, believing they had mis-estimated the outcome of the election.

The second experiment was constructed so that one candidate always had the support of a majority of the potential voters, sixteen of twenty-eight (57%). If the arguments above are correct, information should have no impact on turnout when the majority candidate wins in the fictitious East Coast elections, yet it should have an impact when the minority candidate wins or ties on the East Coast.

As expected, the impact of information on turnout when the majority candidate wins in the first group is negligible. Compared to elections without information, turnout among the supporters of the majority candidate decreases slightly from 65% to 59% (t=-1.05, p=0.23). Supporters of the minority candidate also turn out in slightly smaller numbers, dropping from an average of 37% to 25% per election, but the difference is insignificant (t=-0.88, p=0.43).
When the minority candidate wins or ties on the East Coast and the participants know this, and the impact on turnout is dramatic. Supporters of the minority candidate jump on the bandwagon to support their candidate in larger numbers, with average turnout increasing from 33% to 55% (t=2.15, p=0.046), while turnout from the supporters of the majority candidate plummets from 42% to 13% (t=-1.97, p=0.06). This change in turnout is directly attributable to the presence of new information. When the information is not present, the minority candidate winning the East Coast has no impact on turnout (t=0.40, p=0.66). Figure 3 shows these differences.

Figure 3. Turnout By Information, Majority/Minority Status, & East Coast Winner
What about the impact on sub-national elections? If the information provided to the second group only confirms the results of the pre-election information, the minority candidate in each in-group election should win approximately 33% of the elections\textsuperscript{8}.

Table 1. Within-Group Elections for Group B

<table>
<thead>
<tr>
<th></th>
<th>Information Not Present</th>
<th>Information Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majority Win</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Minority Win</td>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>

Pearson $\chi^2(1)=2.74 \ p=0.045$

Clearly the information makes a difference in the outcomes of the within-group elections. When the information is present, the minority candidate actually wins more sub-national elections than the majority candidate wins. If the election outcome can be predicted by all participants with relative ease, why should access to information change the likelihood the minority candidate wins in the second group?

The reason is the change in turnout among the participants when the minority candidate wins the East Coast. In four of the ten cases where the minority candidate won among the participants, the minority candidate also won the fictitious East Coast voting. Take out those four cases, and the minority candidate won 33% of the elections, exactly the percentage predicted if the information were to have no effect. In other words, the minority candidate won more elections during the experiment than expected because knowing the minority candidate won on the East Coast was valuable information to the participants that supported the minority candidate. The minority supporters may have experienced a form of the bandwagon effect. Since

\textsuperscript{8} There are a total of 63 possible election outcomes within each group. The majority candidate should win 55.5\% of the within-group elections, the minority candidate should win 33.3\%, and 11.1\% should be ties.
their candidate won unexpectedly on the East Coast, they may have recognized they had a better chance of winning the overall election, thus making them more likely to vote.

The results of the second experiment add substantially to the understanding of the West Coast effect, as well as explaining the discrepancies in the previous research. The one factor that determines if the information affects aggregate election outcomes is whether the information is new or not. When the outcome of the election is uncertain going into the election, access to the information substantially alters overall turnout, and has a clear impact on within-group elections. When one candidate goes into the election with a lead in the polls, learning that candidate is winning the election has little impact on West Coast voters. Learning the majority candidate is losing the election provides new information, and impacts the outcome of both the sub-national and overall elections.

**CONCLUSIONS AND IMPLICATIONS**

The evidence from these tests demonstrate the West Coast effect can be re-created in a laboratory setting. The aggregate analyses repeatedly show the impact of information on turnout and the likelihood to vote. When participants had access to the information, they were generally less likely to vote than if they did not have the information. More specifically, the information showed a substantially greater impact on turnout when the access to the information allowed the participants to gain new information. When the information simply confirmed previous expectations (as in the second experiment), the impact on voter turnout was minimal.

It is this difference between *new* and *confirmatory* information that provides a convincing explanation for the wide variations in the level of impact of information in previous studies of the West Coast effect. If the studies were conducted during elections in which the information provided was primarily confirmatory (Lang and Lang, 1968, among others), it should come as no
surprise the authors found little or no evidence to indicate changes in voting behavior. If the
elections were easily predictable from the pre-election polls, why should learning the polls were
correct alter voting decisions?

For those studies that found evidence of the West Coast effect (Delli Carpini, 1984;
Jackson, 1983; Dubois, 1983), the elections studied were ones in which there was still a
reasonable chance that either candidate could win. All three studies examined the 1980 election
that was still close according to the polls just before the election. For the potential voters in this
election, the outcome was at least somewhat uncertain, making access to election information
valuable to them.

In addition to demonstrating the circumstances under which access to information can alter voting behavior, the analyses set forth here directly address one of the questions long-
ignored by previous research--can an overall change in turnout actually alter the outcome of sub-
national elections? Although many previous authors have asserted this as being true, the results
presented here provide clear statistical evidence that information can bias election outcomes at
the sub-national level. When information is present, minority candidates in the within-group
elections are more likely to win than if the information is not available. This is true even when
one candidate has a clear majority in the pre-election information.

Although this research began with a specific question about West Coast voters gaining
access to East Coast information, the results of the experiments yield far more information than
an answer to a single question. In addition to answering a specific, policy-oriented question, the
experiments provide substantial insight into the general questions about turnout. Through the
process of testing the impact of the West Coast effect, it is possible learn much about the general
process by which individuals use information and what types of information are more valued.
The implications of this for public policy are many. When the media releases the results of presidential elections to the general public before the polls close, voters on the West Coast are likely to be affected. If the presidential election is a landslide for one candidate, supporters of the opposing candidate on the West Coast will stay home in much larger numbers than if they had never received the information. It can be argued that the public has a right to know the results of the presidential election as soon as the information available. While this may be true, it is imperative that the media, the public, and those in the government recognize the impact such releases have on turnout in the general public.

While the impact of early information access on turnout at the national level is clearly an issue worthy of concern, it is the impact of this information on the sub-national elections that has been the focus of most of the public inquiry into the West Coast effect. The results of the experiments provide a glimpse of how this information alters sub-national elections. The evidence is clear—when the information is available, candidates that are projected to win in sub-national elections lose more often than when the information is not available. While these results are only preliminary, they raise serious issues about the rights of the media and the rights of voters.

It is this impact on sub-national elections that should be of the greatest concern to all who are involved in politics, either as practitioners or as scholars. If sub-national elections are altered by the early release of information in the real world anywhere near the rate they were altered in the experimental models, serious questions must be raised about releasing early election information. Candidates for state and local offices across the West Coast may well find themselves at the mercy of voters they have never met and can never hope to influence. Democratic voters in New York may be responsible for the ouster of Republican incumbents in
California and the incumbents would be powerless to stop it from occurring. If this occurs, one can argue that the release of the early election information deprives West Coast candidates of the right to be elected or defeated on their own merits. No matter how strong a candidate may be, if the East Coast election returns result in high levels of abstention, the candidate may well go down to defeat.

It has been over thirty years since television networks began to release early election returns to the public on election day. In that time, scholars and pundits have argued about the impact of this information on West Coast voters. Despite dozens of attempts by previous scholars, the evidence has remained inconclusive. The results of this research provide clear and convincing evidence of the existence of the West Coast effect. The evidence clearly shows that access to early election returns can decrease voter turnout and impact West Coast elections, but only in situations in which the outcome of the national election is not a foregone conclusion prior to election day. Given this, society must seriously consider which is truly more important: freedom of the press, or the principle of one person, one vote. The results of these tests demonstrate that we cannot have both.
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