

McCain, Dean, and Kerry
Surfing the "e-mentum" Wave:
*Quantifying Technological Momentum Bonuses
In Presidential Nominations*

By Christopher C. Hull
Georgetown University Department of Government
hullc@georgetown.edu
1816 S St. NW
Apartment #2
Washington, DC 20009
(202) 2589710

Abstract

Are technological changes amplifying the impact of momentum in presidential races? Specifically, do moments of increased momentum pay off bigger in a world of online fundraising, web-based organizing, and email communication? The question is important because the literature is rife with studies of momentum's impact on the state-by-state dynamics of primary election presidential politics. But momentum's impact appears to be changing. In 1980, George Bush the elder won the Iowa Caucus but could not capitalize on his "Big Mo." Yet in 2004, for the first time since Carter, Iowa momentum again carried a candidate to the nomination. The reason may be that the Internet finally allows cash-strapped, trailing candidates to jack into money and supporters online fast enough to catch up with frontrunners, given a big enough win – call it "e-mentum." This paper finds that e-mentum is a quantifiable, statistically significant phenomenon, with respect to Iowa's impact on both the New Hampshire Primary and the ultimate nomination. It further estimates specific e-mentum "bonuses" from Iowa in both contests, as well as the amount by which current models seem to be underestimating Iowa's effects. Finally, it seeks to provide a roadmap for others who wish to investigate e-mentum's effects, especially looking forward to 2008's crucial inflection points in the presidential campaign – the Iowa and New Hampshire but also Super Tuesday, the party conventions, and the presidential debates.

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I. Introduction

The morning after his victory over Ronald Reagan in the 1980 Iowa caucuses, George Bush the elder was chatting with Bob Schieffer on the CBS 'Morning' show about his prospects in New Hampshire, and he let drop one of his many cultured pearls of wisdom. "What we'll have, you see," Bush said, "is momentum. We will have forward 'Big Mo' on our side, as they say in athletics."

Schieffer asked, "'Big Mo?'" A cordial Bush responded, "Yeah, 'Mo,' momentum."²

Or, described more simply – and ironically, in the longer term – by Gary Hart in 1984 after doing modestly well in Iowa and seeing attention on him explode: "You can get awful famous in this country in seven days."³

Awful famous is right, in his case. And until 2004, the open question was whether a presidential candidate could ever again get awful famous enough fast enough to pull off what Jimmy Carter did in 1976: riding a win in Iowa all the way to the nomination.⁴ John Kerry started out a more formidable candidate, who held the frontrunner title for months, granted. But in Dean he also toppled a frontrunner far more formidable than Carter's competitors. Regardless, the impact of the early key events in 2004 – Iowa and New Hampshire – seemed to have an important impact on the race, one worth verifying empirically.

This paper was presented to the 2005 Midwest Political Science Association Annual Meeting under the title "The Big Mo from 1980 to 2004: Is Technological "e-mentum" Amplifying Key Events in Presidential Races?" on Panel 21-5: Defining Moments and Significant Stories in the 2004 Presidential Campaign Cycle, April 7, 2005. That paper, in turn, was built upon a shorter paper presented to the Northeast Political Science Association Annual Meeting, November 11-13, 2004, "Kerry-ing the Hawkeye State: The Iowa Caucus' Impact on the Presidential Race, 1976-2004." I wish to thank Clyde Wilcox, James Lingle, Mark Rom, William Mayer, Barbara Norrander, Wayne Steger, Mike Bailey, Hugh Winebrenner, and Walter Stone for their crucial comments, suggestions and data pointers at various stages of this research.

² Larry M. Bartels, "After Iowa: Momentum in Presidential Primaries," in *The Iowa Caucuses and the Presidential Nominating Process* (Boulder, Colo.: Westview Press, 1989), edited by Peverill Squire, p. 123.

³ *Ibid.*

⁴ Note that Mayer makes the point that Carter was the only one campaigning in Iowa in 1976; see the literature review below for his argument. William G. Mayer, "Forecasting Presidential Nominations", in Mayer, William G., ed., *In Pursuit of the White House – How We Choose Our Presidential Nominees* (Chatham, New Jersey: Chatham House, 1996), p. 63.

However, the argument of this paper is that John Kerry did not ride the same Big Mo that swept Jimmy Carter to the White House, George Bush to the Vice Presidency – and Gary Hart into peaceful intellectual obscurity. He rode a different kind of momentum altogether: a microchip-driven, high-tech tidal wave that carried him further faster than it was possible for a candidate to travel in 1976, 1980 or 1984. This new kind of momentum, I argue, amplifies key events in presidential races by flowing dollars and supporters into the campaign faster than it was ever possible to in the past, using web-based, email-linked, 'blog-boosted online signup and fundraising tools.

Call it “e-mentum.”

To test this hypothesis empirically, this paper includes a series of models based on an original database including new 2004 results and also stretching back to 1976.

First, using this database, it presents two models to test the interplay between performance in the Iowa Caucus, the New Hampshire primary and the nomination, not factoring in a technological shift, in an attempt to establish the baseline impact that key early-state contests have on the nomination and on each other.

Second, it updates those baseline models to add a measure of “e-mentum” to the mix, in an attempt to isolate any increase in Iowa’s impact on either the nomination or New Hampshire based on the technological tools a candidate employs. It also uses those revised models to estimate quantitatively what additional impact e-mentum is giving to Iowa.

A peek at the results up front: controlling for Exhibition Season factors and New Hampshire results, Iowa is not a significant predictor of ultimate primary performance, and has a limited impact on New Hampshire. But adding *any of the three* e-mentum factors – email communication, online signup, or website traffic – makes Iowa highly significant and a powerful influencer of both contests over the entire 1976-2004 time period. (Likewise, with e-mentum factored in, New Hampshire’s already obvious impact on the nomination becomes visibly more stark, but the results are not presented in this paper.)

Put another way, you cannot understand Iowa’s changing impact on the nomination over that time period *without* taking e-mentum into account.

The overall question of whether e-mentum is on the rise is important because the literature is crammed with exquisitely accurate estimates of the impact of momentum on the state-by-state dynamics of both primary and general election presidential politics (see for instance Norrander, 1993; Bartels, 1988; Bartels, 1989; Brady, 1989; Mayer, 2004, and Cohen, et al., 2004). If momentum’s nature is in fact changing, we should begin to reflect it in our estimates.

Let's look at the history, just briefly. As we have seen, in 1980, George Bush the elder won the Iowa Caucus but could not capitalize on his "Big Mo," and the same is true of Gary Hart. In 1988, Dick Gephardt suffered the same fate, as did Bob Dole the same year. By 2000, John McCain could demonstrate that the Internet allowed candidates to ride momentum to enormous fundraising totals, though he was not quite able to translate a New Hampshire win into the GOP nomination.

In 2004, the Internet played a crucial role in helping Howard Dean raise upwards of \$50 million during his meteoric rise and fall. In Iowa, as the race shifted, e-mentum may have for the first time allowed cash-strapped candidates like Kerry and Edwards to siphon enough resources quickly enough off the online community to fight another day based just on early primary state wins. Kerry galloped up the same online money trail Dean blazed. In the wake of Kerry's Iowa Caucus victory, the presumptive nominee was able to raise \$26 million in just two months - powered by \$18 million flowing in over the Internet, \$2.6 million of it on a single day following his Super Tuesday victories. That's a lot of money.

Dean took to the stage in Des Moines defeated on Jan. 19, 2004 after having reportedly led into battle the largest Internet army ever assembled in politics. If the howl he let out was any indication, the Internet's perceived potential to transform American politics took a lashing in the 2004 Iowa Caucus. But perhaps the opposite was true. Perhaps the Internet's real impact in 2004 was in amplifying Dean's momentum before the Caucus, and then amplifying that of whatever candidate happened to be riding the crest of the "Big Mo" afterwards.

If that is the case, since momentum pervades the literature of presidential politics, our thinking about its role might need to change, especially looking forward to 2008. All the crucial inflection points in the presidential campaign - the Iowa Caucus, the New Hampshire Primary, Super Tuesday, the party conventions, the presidential debates - may need to be re-evaluated taking into account this new technology-driven factor, e-mentum.

II. Review of the Literature

The literature contains a central debate over what the true impact of the Iowa Caucus is on candidates, and more to the point, whether winning it still represents a legitimate step toward the White House, even for dark horses. For instance, Robinson notes that as a result of Bush's win in the 1980 Iowa caucus, polling showed that "support for

Bush among national Republicans had grown from 6 to 24 percent in less than thirty days.”⁵

How could momentum alone produce such a major shift? In his explication of momentum on the heels of the Iowa caucus, Bartels argues that “Although consequential at every stage, expectations matter most in situations where information is scarce – especially for relatively unknown candidates early in the primary season.”⁶ Bartels makes the case that the event’s immediate result is this: “The next morning, if recent history is any guide, America has a new political star.”⁷

He continues: “This pattern has been repeated, with minor variations, in three recent primary seasons. Jimmy Carter in 1976, George Bush in 1980, and Gary Hart in 1984 each managed to parlay a ‘better than expected’ showing in Iowa into media attention, recognition, and public support sufficient to make a serious run at his party’s nomination.”⁸

That stands in stark contrast to Winebrenner, who noted in his masterful 1998 work on the Caucus that no one since Carter has popped up in Iowa and ridden the crest all the way to the White House. “The only dark horse candidate to parlay success in the caucuses to a presidential nomination was Carter himself. The presidential campaign has changed since Carter successfully employed the Iowa/New Hampshire strategy,” including the addition of Super Tuesday, frontloading, and the dominance of paid TV.⁹

However, Winebrenner does believe in the expectations game, as well, allowing that “The candidate who receives the most delegates or votes is not always declared the winner, and candidates who do not do well in an absolute sense are not always called losers.”¹⁰ Argues Winebrenner, “The national media spend a lot of time and money covering the Iowa caucuses, and they alone determine how much importance to attribute to the outcomes.”¹¹

⁵ Michael J. Robinson, “The Media in 1980: Was the Message the Message?” in Austin Ranney, ed., *The American Elections of 1980* (Washington, DC: American Enterprise Institute, 1981), p. 203. Cited in Winebrenner, 95.

⁶ Larry M. Bartels, “After Iowa: Momentum in Presidential Primaries,” in *The Iowa Caucuses and the Presidential Nominating Process* (Boulder, Colo.: Westview Press, 1989), edited by Peverill Squire, p. 133-34.

⁷ *Ibid.*, p. 121.

⁸ *Ibid.*

⁹ Hugh Winebrenner, *The Iowa Caucuses: The Making of a Media Event* (Ames, Iowa State University Press, 2nd Ed., 1998), p. 179.

¹⁰ *Ibid.*, p. 260.

¹¹ *Ibid.*, p. 255.

In 1988, Winebrenner says, "Iowa continued to play the role of winnower. One constant about Iowa's impact on the presidential nominating process is the elimination or mortal wounding of presidential hopefuls who do poorly or fail to meet the expectations of their role."¹²

Like Winebrenner, Mayer discounted the Carter strategy's effectiveness in the post-1976 world. "What is all too rarely mentioned about the 1976 campaign," he says, "is that Carter's efforts in Iowa had received a huge boost from one other special circumstance: through most of 1975, he was the only major candidate campaigning there."¹³ He goes on to argue, "the importance of momentum has probably been overstated."¹⁴ Though it is the only way to explain the bounce of support dark horses like Carter, Hart and Bush received after the event, he says, "In five of the last six contested nomination races, the pre-Iowa front-runner ultimately won the nomination."¹⁵

Brady makes the point that "New Hampshire has a much better record of choosing the nominee precisely because Iowa precedes it." As he puts it, "Iowa has been important in almost every quadrennium because its caucuses have defined the field of contenders either by catapulting newcomers like McGovern, Carter, and Hart to the forefront and dashing the hopes of other hopefuls or by providing a clear-cut sense of the vulnerabilities of incumbents such as Ford in 1976 and Carter in 1980."¹⁶

Polsby notes the candidates seem to think it matters for a state to be early in the process, even as early as 1976. He lays out the amount of money candidates receiving public financing spent per vote in selected states in 1976 and 1980, based on when the contest occurs. He finds that the candidates the year Gov. Carter won the nomination spent more than ten times as much per vote in Iowa as in California, at the end of the process. And in 1980, that ratio had climbed to 60 to 1.¹⁷

During the 1988 contest, Bartels argues, "The fact that neither of the Iowa winners could parlay his post-caucus momentum into real success in the rest of the campaign has led some commentators to downplay the likely significance of the Iowa caucus.... But the actual course of the 1988 campaign, both on Super Tuesday and thereafter, seems to belie this reasoning," as polling from the south reflected a modest but clear

¹² Hugh Winebrenner, *The Iowa Caucuses: The Making of a Media Event* (Ames, Iowa State University Press, 2nd Ed., 1998), p. 180.

¹³ William G. Mayer, "Forecasting Presidential Nominations", in Mayer, William G., ed., *In Pursuit of the White House - How We Choose Our Presidential Nominees* (Chatham, New Jersey: Chatham House, 1996), p. 63.

¹⁴ *Ibid.*

¹⁵ *Ibid.*, p. 65.

¹⁶ Henry E. Brady, "Is Iowa News?" in *The Iowa Caucuses and the Presidential Nominating Process* (Boulder, Colo.: Westview Press, 1989), edited by Peverill Squire, p. 91.

¹⁷ Nelson W. Polsby, "Consequences of Party Reform," Oxford University Press, New York, 1983, p. 61.

five percentage point 'bump' from Iowa and New Hampshire for both Dole and Gephardt.¹⁸

Concludes Bartels: "The candidates' real political identities may not always matter from the start, in the first few weeks after an exciting new candidate like Carter, Bush or Hart emerges from Iowa with momentum; but they matter in the end. The danger, from an institutional standpoint, is that by then it may be too late."¹⁹

Wolfinger poses the question, "Just why does a primary defeat knock a candidate out of the race?"²⁰ Some answers he provides are, first, that "Candidates need contributions and donors are discouraged by the prospect that they will be wasting their money." Therefore Iowa particularly endangers those who are running without a large cache of resources -- "betting on the come," as the expression goes.

Second, Wolfinger says, in a more extreme example of "betting on the come," some candidates run hoping not just money, but popularity, will come after an early win. Such candidates, running "on spec" as Wolfinger describes it, simply never catch on if they fail to achieve that early win.

Finally, argues Wolfinger, Iowa menaces those without "an identifiable and relatively enthusiastic constituency." Those with such a following are "a good deal more immune" to Iowa's winnowing effect than other candidates, Wolfinger says, citing the examples of Ronald Reagan, Jesse Jackson, and Pat Robertson.²¹

In conclusion, Wolfinger argues that Iowa does not so much shoo candidates into the nomination as it does shoo them out the door. "While the outcome of the Iowa caucuses will not anticipate either party's eventual nomination," he says, "those caucuses will not certainly produce fairly convincing evidence that some candidates are not longer in the race."²² In a crowning phrase, Wolfinger adds: "Iowa is not so much a king-maker as a peasant-maker."²³

Is it so that Iowa is not a king-maker? On one hand, according to analyst Charles Cook, "If you look at the last seven presidential elections," he says, "[of] the last 14 Democratic and Republican nominations, 13 out of 14 have gone to a candidate who

¹⁸ Larry M. Bartels, "After Iowa: Momentum in Presidential Primaries," in *The Iowa Caucuses and the Presidential Nominating Process* (Boulder, Colo.: Westview Press, 1989), edited by Peverill Squire, p. 143.

¹⁹ Larry M. Bartels, "After Iowa: Momentum in Presidential Primaries," in *The Iowa Caucuses and the Presidential Nominating Process* (Boulder, Colo.: Westview Press, 1989), edited by Peverill Squire, p. 135.

²⁰ Raymond E. Wolfinger, 'Who Is Vulnerable to the Iowa Caucuses?' in *The Iowa Caucuses and the Presidential Nominating Process* (Boulder, Colo.: Westview Press, 1989), edited by Peverill Squire, p. 166.

²¹ *Ibid.*

²² Raymond E. Wolfinger, 'Who Is Vulnerable to the Iowa Caucuses?' in *The Iowa Caucuses and the Presidential Nominating Process* (Boulder, Colo.: Westview Press, 1989), edited by Peverill Squire, p. 164.

²³ *Ibid.*

won either the Iowa caucuses or the New Hampshire primary or both.”²⁴ And no American has become president since 1972 without finishing at least third in Iowa.

On the other hand, then-Gov. John H. Sununu has argued that “The people of Iowa pick corn, the people of New Hampshire pick presidents.”²⁵ Flip as he may be, a recent study (Adkins and Dowdle, 2001) bears out his deprecation of Iowa. Adkins and Dowdle build a model of how candidates perform in the rest of the nomination fight, based in part on performance in Iowa and New Hampshire. They determine that “the New Hampshire primary obviously holds a greater influence on nomination forecasting than do the Iowa caucuses,” and finds instead that “the reality is that momentum generated by these contests only seems to assist also-ran candidates in displacing other also-ran candidates.”²⁶ Instead, they find, the front-runner in the pre-primary “Exhibition Season” is almost invariably the one who has come home to win the nomination.

That said, Adkins and Dowdle’s sophisticated model was constructed before the 2004 cycle, with Kerry besting front-runner Dean in Iowa and propelling himself to the nomination. It also does not include 1976, when Carter’s Iowa win arguably boosted him to the White House. Thus adding 1976 and 2004 may increase Iowa’s role in a primary predictive model.

Also, because their model uses a dummy variable for Iowa (and New Hampshire) winners rather than a relative performance measure, the model misplaces Hart in its 1984 predicted rankings in a way that the fact that he finished a strong second to Mondale in the state would help ameliorate. Perhaps using a measure of relative Iowa performance like vote share rather than a dummy variable could help better explain the state’s impact on a candidate’s ultimate primary performance.

Finally, more broadly, there is a logical challenge to the (widely-held) position that New Hampshire better predicts the ultimate nominee. Quite simply, it comes second. Therefore, in a sense New Hampshire can reflect the results of the Iowa Caucus, but not vice versa. It would stand to reason that candidates who fare poorly in Iowa might be hurt going into New Hampshire, and that candidates who fare well in Iowa might be helped in the Granite State.

But it obviously is impossible for New Hampshire to influence Iowa’s results. So it would not be surprising if New Hampshire’s results more closely mirrored the

²⁴ Alexandra M. Abboud, “A Look Ahead: The New Hampshire Primary,” U.S. Embassy Islamabad, <http://usembassy.state.gov/islamabad/www04012202.html>.

²⁵ “New Hampshire primary,” Wikipedia, http://en.wikipedia.org/wiki/New_Hampshire_primary

²⁶ Randall E. Adkins and Andrew J. Dowdle, “How Important Are Iowa and New Hampshire to Winning Post-Reform Presidential Nominations?” *Political Research Quarterly*, vol. 54, no. 2 (June 2001), p. 440, 441-442.

nomination outcome. After all, the best state for predicting the ultimate nominee would not be Iowa or New Hampshire – but the final state in the nomination process. (Granted, this is also an argument for measuring the Exhibition Season’s impact without Iowa, but the relative roles of the two is the focus of this paper in a way that New Hampshire and Iowa’s relative impact is not.) One important issue, then, is how much Iowa influences New Hampshire’s results, relative to the Exhibition Season.

Mayer has explored this possibility in a compelling recent study.²⁷ In it, he constructs a model to test Iowa’s impact on the New Hampshire primary – and includes in it pre-Iowa polling data from the Granite State, to control for the *status quo ante* before the Caucus. He finds that holding pre-Iowa poll standings constant, winning the Caucus has no statistically significant impact on the New Hampshire Primary’s results (though placing second may, he finds).²⁸ He also demonstrates that first and second place finishes in Iowa are not statistically significant predictors of ultimate primary performance, controlling for first and second place finishes in New Hampshire.²⁹ Based on those results, Mayer’s argument is that “Iowa does have an impact on many races, but that impact is mediated through New Hampshire.”³⁰

Like Adkins and Dowdle, Mayer tests dummy variables for top-placing candidates in Iowa and New Hampshire. His analysis leaves open the possibility that using a continuous variable to measure both Iowa and New Hampshire performance would find more explanatory power, if nothing else because of Iowa’s role as a peasant-maker.

The literature, then, leaves two momentum questions to address before we begin to measure the e-mentum created by Iowa and New Hampshire. First, is it so that New Hampshire swamps Iowa’s explanatory power, even using Iowa performance rather than just winning or placing in Iowa as the predictor? Second, to what extent does Iowa influence New Hampshire relative to the Exhibition Season, again using continuous variables rather than dummy variables for top finishes?

After we address those two questions, we will have a baseline from which to measure e-mentum’s effects.

²⁷ William G. Mayer, “The Basic Dynamics of the Presidential Nomination Process: An Expanded View,” in William G. Mayer, ed., *The Making of the Presidential Candidates 2004* (Lanham, Md.: Rowman & Littlefield Publishers, 2004), pp. 83-132. The author is indebted to Mayer both for pointing out this portion of his work, and for providing New Hampshire polling data crucial to replicating it.

²⁸ *Ibid.*, p. 111.

²⁹ William G. Mayer, “The Basic Dynamics of the Presidential Nomination Process: An Expanded View,” in William G. Mayer, ed., *The Making of the Presidential Candidates 2004* (Lanham, Md.: Rowman & Littlefield Publishers, 2004), p. 106.

³⁰ *Ibid.*, p. 107.

III. Data and Variables

In order both to answer baseline momentum questions and test the impact of momentum, I relied upon an original pooled cross-sectional and time-series³¹ database of major-party presidential candidates from 1976 to 2004. That dataset includes “Exhibition Season” performance on national fundraising, national polling performance and the size of the field, all measured in relative terms, as well as candidates’ vote share in Iowa, New Hampshire and the presidential primary popular vote.

In addition, the database includes the results of a survey I conducted in Iowa just prior to the 2004 Caucus, which asked active Iowa Republicans and Democrats (former Caucus-goers and those voting in the last two primary elections, respectively) for each 1996, 2000 and 2004 candidate:

- Whether they had signed up online as a supporter of the candidate
- Whether they had been received an email from the candidate
- Whether they had visited the candidate’s website, and
- Whether they had read an Internet news story or commentary on the candidate.

While Internet activity from 2000 and 1996 gathered from a 2004 survey is admittedly suspect, it does have the benefit of creating the equivalent of panel data from the respondents.

Within the broader dataset, primary performance is measured using Primary Popular Vote Share, the percentage of the total votes cast in all states’ primaries and caucuses that each candidate won. That information is derived from *America Votes*, the semiannual compendium of election statistics.³²

Each candidate’s Iowa performance is measured using Iowa Caucus Vote Share, simply the percentage of the vote won by each candidate in each given race.³³ The results are drawn from publicly-available sources, including especially Winebrenner

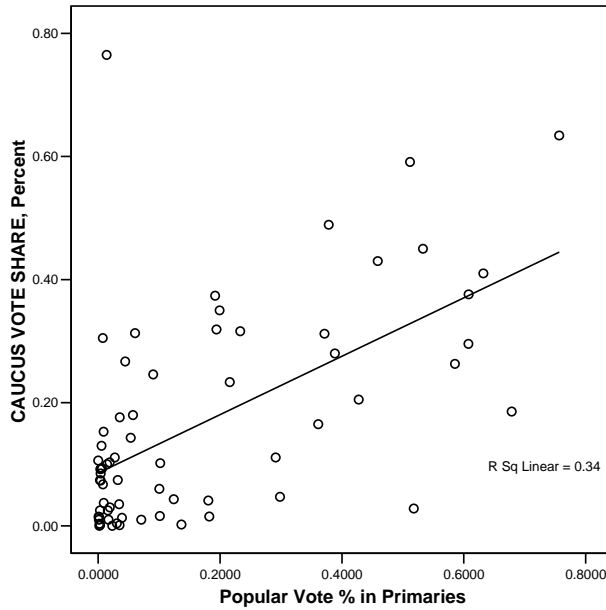
³¹ Note that “time-series” is something of a misnomer here – the data occur over time, but they in no way are panel data, going back to the same subjects, or even the same number of subjects, at each time t .

³² Richard M. Scammon, Alice V. McGillivray, and Rhodes Cook, *America Votes 22: A Handbook of Contemporary American Election Statistics* Congressional Quarterly: Washington, D.C., 1996, and Richard M. Scammon, Alice V. McGillivray, and Rhodes Cook, *America Votes 24: A Handbook of Contemporary American Election Statistics* Congressional Quarterly: Washington, D.C., 2000. Note that the total number of primary votes includes those cast in Iowa and New Hampshire, which would tend to inflate slightly the explanatory power of those two states. However, considering that they represent only 2% and .5% of that vote, I preferred to use the official total rather than factor the two states out. A future study might examine the impact of pursuing that course, but I believe the impact on the results would be minimal.

³³ Note that the first model uses an unscaled version of the Iowa Caucus Vote Share, where the latter three scale out “Undecided” and “Undeclared” totals, allocating those percentages proportionally among the candidates according to the candidates’ performance in Iowa.

(1998).³⁴ The relationship between Caucus Vote Share and Primary Popular Vote Share is reflected in Figure 1.

Figure 1: Caucus Vote Share and Primary Popular Vote Share



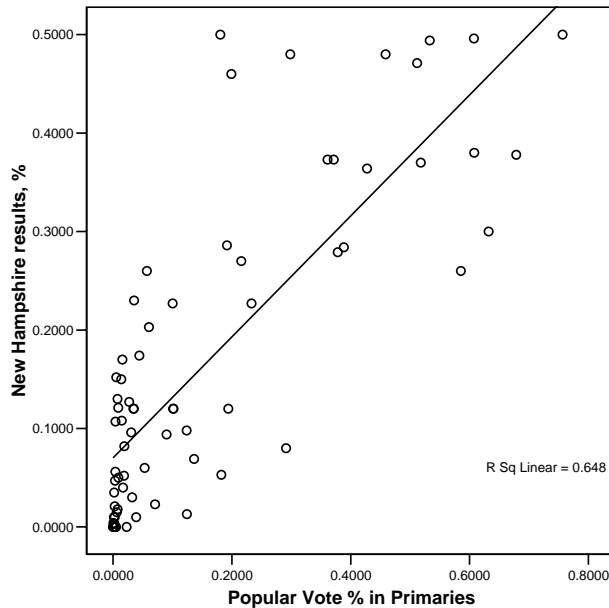
A candidate's performance in the Iowa Caucus is obviously not the sole determinant of his performance in the entire process. Information on Iowa performance alone allows us to explain about one-third of the variation in a candidate's primary performance (bivariate regression $R^2 = 0.34$).

By contrast, the linear relationship between New Hampshire and Primary results is very strong, as Figure 2 demonstrates. New Hampshire Vote Share, namely the percentage of the Granite State primary vote also drawn from publicly available sources, especially Gregg (1993),³⁵ explain two-thirds of variation in candidate performance (bivariate regression $R^2 = 0.648$).

³⁴ Hugh Winebrenner, *The Iowa Caucuses: The Making of a Media Event* (Ames, Iowa State University Press, 2nd Ed., 1998). For the recent results presented in a more accessible summary fashion, see also the Des Moines Register website, www.desmoinesregister.com.

³⁵ Hugh Gregg, *A Tall State Revisited: A Republican Perspective*, Resources of New Hampshire, Inc., 1993. Much of Gregg's data are available at from politicallibrary.org, at <http://www.politicallibrary.org/TallState/listing.html>.

Figure 2: New Hampshire Primary Vote Share and Primary Popular Vote Share



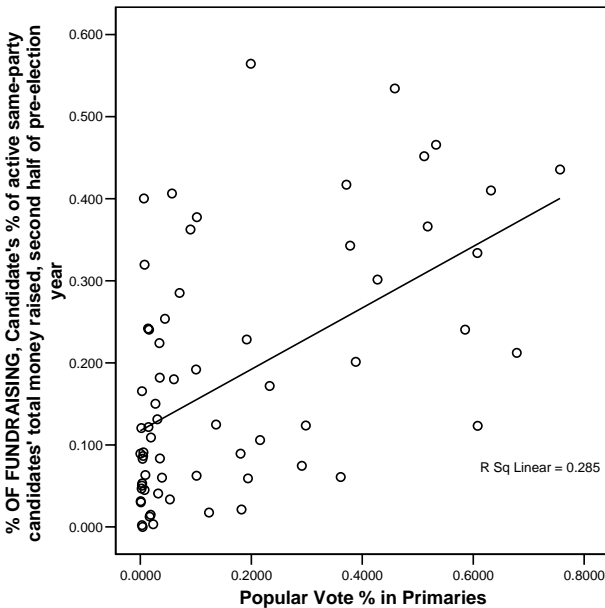
For the database in the paper, the 1976-2004 national fundraising data is drawn from the Federal Election Commission and adjusted into real (2004) dollars.³⁶ In all models, national fundraising is measured by the national receipts for the candidate for the second and third quarters of the year before the election. The relative fundraising performance variable that is specifically used is a candidate’s percentage of the total dollars raised by all major candidates in his party during that period.

Adkins and Dowdle (2001) include national fundraising before caucuses and primaries begin as a crucial measure of success during the “Exhibition Season.”³⁷ Its relationship with a candidate’s primary performance appears weaker than that with either Iowa or New Hampshire performance, but there still appears to be a correlation (Figure 3). As we will see, controlling for national polling strength and fundraising produces an interesting empirical result when estimating primary performance.

³⁶ The figures used to determine “real” spending figures come from the U.S. Department of Labor Bureau of Labor Statistics. Specifically, I used the All Urban Consumers (CPI-U), U.S. city average, which puts 1982-84=100. Note that to get real (2002) dollars for instance, the number is divided by the CPI Index for the year it occurred, then multiplied by 179.9, the 2002 index.

³⁷ Randall E. Adkins and Andrew J. Dowdle, “How Important Are Iowa and New Hampshire to Winning Post-Reform Presidential Nominations?” *Political Research Quarterly*, vol. 54, no. 2 (June 2001), pp. 431-444.

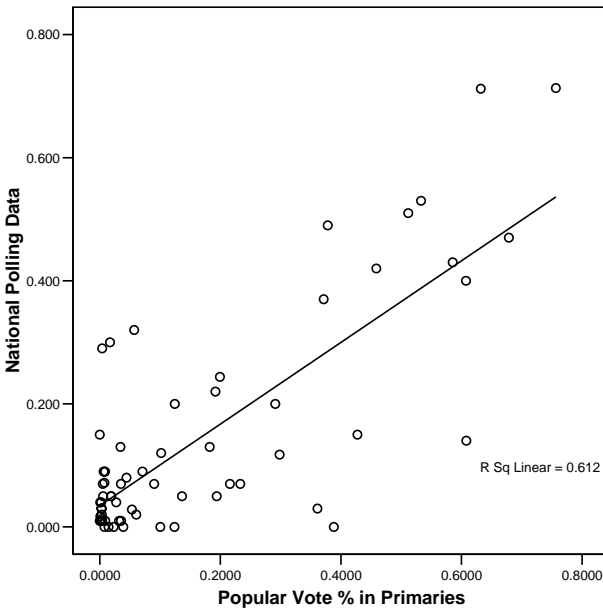
Figure 3: Relative Fundraising Performance and Primary Popular Vote Share



The database also includes information on National Polling Performance relative to the other candidates in the primary contest (Figure 4). The national polling data used in the Predictive Model was drawn from multiple sources, with an attempt to find the latest national poll that took place before the Caucus.³⁸ National Polling Performance against a candidate's primary opponents has a strong positive correlation with that candidate's ultimate vote share in the primary process, explaining over 60% of its variation (bivariate regression $R^2 = 0.612$).

³⁸ See *The Iowa Caucuses and the Presidential Nominating Process* (Boulder, Colo.: Westview Press, 1989), ed. Peverill Squire, pp. 9-10. 2000 Republicans are from ABC Washington Post Poll, December, 1999. 1996 Republicans are from the New York Times, Jan 23, 1996, two weeks before the Iowa Caucus. (Note that I used a 1% estimate from that poll for those that the *Times* reported got 2% or less.). Though I sought to find polling as close to the Caucus as possible, 1988 Democrats are from Dec. 1987, and 1988 Republicans are from Oct. 1987. Because this 1976-2004 national polling data is neither standardized nor sourced so as to be replicable, during the course of this study I replaced it with a single poll, the Gallup Poll, at the closest point to the Caucus, the practice more common in the literature. The models which use each are clearly marked, with a description of any (minor) differences the switch caused.

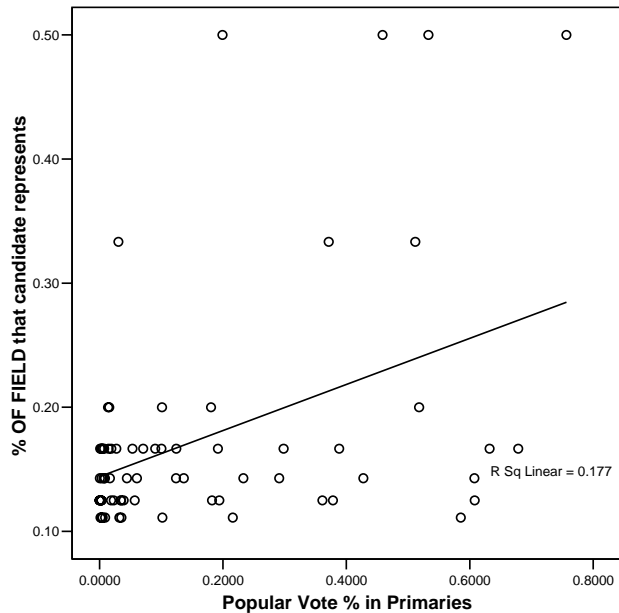
Figure 4: National Polling Performance and Primary Popular Vote Share



Finally, the models in the paper include a theoretically important control for the percentage of the field that the candidate represents at the beginning of the primary process (Figure 5). We would assume that a major factor in a candidate’s primary vote total is the number of candidates he faces. In 2000, Al Gore and Bill Bradley faced off in a mano-a-mano duel for the Democratic nomination. By contrast, in 1996 Bob Dole was overrun with top-tier opponents – 10 figured in the national polling before the primaries began – which would have a dramatic effect on his early vote totals and his final share of the vote. Yet those differences in primary performance have little to do with a candidate’s strength.³⁹

³⁹ Defined as those who had non-zero results after rounding in *either* national polls *or* the Iowa Caucus. Al Sharpton is the only candidate included exclusively because of his profile.

Figure 5: Percentage of the Field the Candidate Represents and Primary Popular Vote Share



To control for this artifact, we can include the percentage of the field that the candidate originally represented. It would be a factor more linearly related to percentage of the vote share than number of candidates in the field, while still capturing the same information. It has some limited explanatory power (bivariate regression $R^2 = 0.177$), but regardless is important to include in each model.

Note that the database is structured around competitive Iowa races. That is, the estimates are based upon election cycles in which Iowa was seriously contested, defined as those in which the second-place finisher obtained less than 25% of the share of the field he represents, given the number of candidates in the race.⁴⁰ Crucially, this leaves out 1992 on both the Republican and Democratic side. On the Republican side, Buchanan campaigned aggressively against Bush for the nomination, but chose to begin that battle in New Hampshire. Ultimately, of course, the sitting president Bush was able to capture the nomination, but arguably leaving out the New Hampshire results, with Buchanan capturing a sizeable minority of the vote, skews the results of this analysis.

⁴⁰ The statistic in question is the “proportional vote share,” and is obtained simply by dividing the vote obtained by the percentage of the field the candidate represents (which of course is also the percentage of the vote the candidate would expect to get, *ceteris paribus*.) Once the proportional vote share statistic was obtained, I used it to measure each cycle by how strongly the nearest competitor to the winner fared, and decided that any cycle in which that competitor finished with less than 25% of his vote share was uncompetitive and should be excluded. In fact, the line for a competitive race could be drawn in a wide range and still exclude 1992 and the other more completely uncontested races, while leaving in place 2000, 1976, 1984 and the other more contested races. In 1992, second-place finisher Tsongas received only 21% of his vote share. The next-worst fate for a second-place challenger was 2000, when Bradley received 70% of his vote share. By this measure, the most competitive race was the 2004 Democratic contest, when second-place finisher Edwards had more than double his vote share, or 255%.

On the Democratic side, Iowa Sen. Tom Harkin's presence in the race mooted Iowa's role, leading other candidates to all-but-bypass the state. Instead, then-Gov. Bill Clinton, D-Ark., took his struggling campaign to New Hampshire, where he was able to post a stronger-than-expected challenge to the late Sen. Paul Tsongas, D-Mass. Again, arguably excluding that contest from consideration drops out a race where New Hampshire made an important impact.⁴¹

My counterarguments would be that, first, the races tend to cancel each other out, as one strong performance in New Hampshire led to the nomination and one did not; second, in neither case did the New Hampshire winner capture the nomination; and third and crucially, the analysis is simply aimed at estimating Iowa's impact when it is contested, not when it is uncontested.

Also note that this model does not include a measure of endorsements or press coverage, two additional common metrics of success in the Exhibition Season. The model might also include a measure of frontloading, such as those used in the comprehensive study on the topic by Mayer and Busch (2004).⁴² After all, over the years, party leaders have explicitly acknowledged that they are tweaking in primary rules to determine a winner more quickly, in order to preserve their resources for the general election. That helps explain why nominees are piling up larger and larger shares of the primary popular vote, which is not reflected in this paper's model. The addition of any of those factors would strengthen future models.

Finally, note that other, far more sophisticated models of primary vote performance can be found, and come highly recommended (Bartels, 1988, Norrander, 1993, Mayer, 2004, Cohen, 2004). The purpose of this study is not to compete with or replicate those models, but merely to measure Iowa against basic measures of the Exhibition Season and New Hampshire.

IV. Models and Estimates

We have raised two questions we should answer to determine the baseline role that Iowa and New Hampshire play in the outcome of the nomination fight, before we add in e-mentum's role:

First, does New Hampshire indeed swamp Iowa's influence on ultimate primary performance?

⁴¹ Only in the first model is the Democratic side excluded.

⁴² William G. Mayer and Andrew E. Busch, *The Front-Loading Problem in Presidential Nominations*, Brookings Institution Press, Washington, D.C., 2004.

Second, to what extent does Iowa influence New Hampshire, controlling for the effects of the pre-Caucus political landscape?

1. Iowa vs. New Hampshire: No Contest

To address whether New Hampshire out-performs Iowa as a predictor of primary performance, we can build a basic model that includes both Iowa and New Hampshire performance for each candidate, using both to explain the proportion of the total primary vote a candidate wins, controlling for Exhibition Season performance and number of candidates in the field. Then using otherwise least squares (OLS) regression, we can estimate the independent impact of Iowa and New Hampshire performance on ultimate primary performance. The results are reflected in Table 1, with full results in the Appendix under Model 1.

Table 1: Iowa vs. New Hampshire in Predicting Primary Vote

Variable	Unstandardized Beta	Std. Error	<i>p</i>
NEW HAMPSHIRE VOTE SHARE, %	0.829	0.124	0.000
IOWA CAUCUS VOTE SHARE, %	0.153	0.133	0.254
<i>Controls</i>			
FUNDRAISING, Candidate's % of active same-party candidates' total money raised, second half of pre-election year	-0.341	0.126	0.009
NATIONAL POLLING DATA	0.637	0.102	0.000
% OF FIELD that candidate represents	-0.306	0.171	0.079
(Constant)	0.027	0.024	0.267
<i>Dependent Variable: Popular Vote % in Primaries</i>			

R² = .838 Adj. R² = .823 F = 55.849 Sig. < .001

The answer is stark. Controlling for New Hampshire results and measures of Exhibition Season performance, Iowa is not a statistically significant predictor of overall primary performance. That finding provides empirical heft to Sununu’s quip. It also reinforces Adkins and Dowdle’s 2001 finding, even including 1976 and 2004 results, and employing a measure of Iowa performance rather than a dummy variable.

Another interesting result of this model: while both fundraising and national polling strength are significant, the former has a negative sign. This result is common in models that include national polling: holding that crucial measure of party support

constant, candidates who raise and spend more money tend to be those who lose. So while as we have seen fundraising has a positive bivariate relationship with primary performance, holding polling support (and the other factors in the model) constant that relationship is negative and significant.

According to this model, then, controlling for New Hampshire’s influence on the nomination, we cannot rule out the possibility that Iowa has none at all.

2. What Effect Does Iowa Have on New Hampshire: Some Impact, but Hard to Quantify

How much of a role does Iowa’s outcome play in explaining New Hampshire primary results, controlling for the impact of the Exhibition Season, as well as for pre-New Hampshire polling? That is, given the political landscape nationally and in the Granite State before the Caucus takes place, what effect does the Caucus have?

We can also build a straightforward model to test this question, using OLS regression to measure the independent impact of Iowa Vote Share on New Hampshire’s results. Note once more that Iowa Vote Share is a continuous variable, a distinction from the Adkins and Dowdle and Mayer models that were (understandably) more focused on winning or placing in Iowa and New Hampshire than on overall impact. Also note that for this model, a more consistent measure of national polling has been included than that used in the other baseline models, built on Gallup polls; the results using the less well-sourced national polling data variable were similar except that the fundraising control became significant (and remained negative), and the Iowa Caucus variable was even more highly significant. A summary of the results are reflected in Table 2, with the full results included in the Appendix under Model 2.

Table 2: Iowa vs. the Exhibition Season Predicting New Hampshire

Variable	Unstandardized Beta	Std. Error	<i>p</i>
IOWA CAUCUS VOTE SHARE, %	0.155	0.074	0.040
<i>Controls</i>			
FUNDRAISING, Candidate's % of active same-party candidates' total money raised, second half of pre-election year	-0.089	0.125	0.478
GALLUP POLLING DATA	-0.107	0.113	0.349
% OF FIELD that candidate represents	0.079	0.154	0.612
NEW HAMPSHIRE POLLING DATA	0.937	0.152	0.000
(Constant)	0.003	0.022	0.906
<i>Dependent Variable: New Hampshire Vote Share, %</i>			

R² = .729 Adj. R² = .708 F = 33.960 Sig. < .001

The results here in terms of quantifying Iowa's impact are mixed. On one hand, Iowa is one of only two significant predictors of a candidate's New Hampshire performance, and swamps the Exhibition Season measures of national fundraising and Gallup polling, as well as the candidate's share of the field. In fact, none of those three controls are even significant, so we cannot reject the null hypothesis that in fact they have no independent effect on New Hampshire Vote Share, controlling for Iowa and a candidate's standing in pre-Caucus New Hampshire polls.

On the other hand, looking closely at the model's results, we see that quantifying Iowa's impact is difficult. The model estimates that for every percentage point a candidate wins in Iowa, he gains about an eighth of a percent in New Hampshire, holding other factors constant. But the standard error is high; the confidence interval is such that with 95% confidence we can say only that a candidate would gain between a sixteenth and a quarter of a percentage point, all things equal. Such results could be decisive, but they are hardly overwhelming.

It is also important to qualify that this is by no means a fully-specified model of New Hampshire performance. Were we to try to measure Iowa's actual impact more exactly, we might want to control for candidate level of effort in New Hampshire. For instance, a more fully-specified model might include candidate choices such as television advertising, total spending in the state, and press coverage in the state. Campaigns matter, after all, and candidate choices in Iowa likely overlap with their choices in New Hampshire in ways that amplify the apparent impact of the Iowa Caucus Vote Share variable in our model.

But that wasn't the question. The question was, controlling for the Exhibition Season and pre-Caucus New Hampshire polling, whether Iowa's results had a significant relationship with New Hampshire results. All qualifications aside, we can say with reasonable assurance that the answer to that question is yes. The First-in-the-Nation Caucus matters to what happens in the First-in-the-Nation Primary, even if how much is an open question.

Fair enough, overall, New Hampshire appears to swamp Iowa's impact on the race, though Iowa appears to have some impact on New Hampshire. That would tend to support Mayer's contention that New Hampshire "mediates" Iowa's results. On this foundation, we can build an exploration of whether Iowa and/or New Hampshire's impact on the nomination is on the rise proportionally to the increase in candidates' use of Internet tools.

Specifically, let's revisit the two models, gauging Iowa's impact on the nomination and on New Hampshire, but factoring in each candidate's use of Internet tools.

3. Iowa e-mentum and Primary Results: A Crucial Measure of the Caucus' Impact

Does Iowa matter more in a world of nearly instantaneous fundraising and supporter signup, even holding New Hampshire's results constant? To find out, I modified the Iowa vs. New Hampshire Primary Vote model by including not the percentage total each candidate won in Iowa,⁴³ but the combined explanatory power of Iowa and a metric of each candidate's use of the Internet. The two factors were combined by regressing both Caucus Vote Share and the Internet metric on Primary Vote Share. The Internet use metric used in the models presented below is Online Signup, that is, the percentage of surveyed members who had signed up as online supporters for the candidate. However, the results from all three metrics – Online Support, Email Contact, and Website Visits – were virtually identical in both the primary and the New Hampshire models.

For those with questions about the construction of the e-mentum factor itself, it is important to note that not only is the result the same across the three factors, but across alternative specifications of the model. For example, simply entering in the Online Support factor into the Primary model below causes the Iowa Vote Share factor to become statistically significant, and at about the same level as the online support e-mentum factor. In order both to measure e-mentum's impact coming out of Iowa and to control for the Internet factors themselves, however, I felt that the specifications below were the most appropriate ones.

The results of the e-mentum model of Primary Vote Share are reflected in Table 3, with the full results included in the Appendix under Model 3.

Table 3: Iowa e-mentum and New Hampshire Predicting Primary Vote

Variable	Unstandardized Beta	Std. Error	p
NEW HAMPSHIRE VOTE SHARE, %	0.681	0.129	<0.001
IOWA e-MENTUM FACTOR	0.316	0.129	0.018
<i>Controls</i>			
FUNDRAISING, Candidate's % of active same-party candidates' total money raised, second half of pre-election year	-0.453	0.133	0.001
GALLUP POLL SUPPORT, %	0.708	0.108	<0.001
% OF FIELD that candidate represents	-0.245	0.161	0.135
Online support - % of surveyed partisans signed up online	-0.001	0.005	0.856
(Constant)	-0.002	0.023	0.933
<i>Dependent Variable: Popular Vote % in Primaries</i>			

R² = 0.842 Adj. R² = 0.825 F = 49.585 Sig. < .001

⁴³ Note that in fact, I used a scaled Iowa Caucus vote total, eliminating "Uncommitted" and "Undecided," which count for large proportions of especially early cycles. I am indebted to Wayne Steger for pointing out the importance of doing so.

In this model, Iowa e-mentum is statistically significant, even controlling for the New Hampshire result. The implications of this shift are crucial. We have learned that the First-in-the-Nation Caucus results themselves are not a significant predictor of primary outcomes, holding the First-in-the-Nation Primary results constant. But adding the explanatory power of a candidate's Internet capabilities, the factor explains a significant amount of the variation in primary performance. So while raw Iowa performance may not matter relative to New Hampshire, in 1996, 2000 and especially 2004 it has come to mean increasingly more.

Let's quickly quantify how much this individual Internet tool matters to boosting a candidate's momentum coming out of Iowa, holding Iowa results constant. In the model used to generate the Iowa e-mentum factor, the percentage of online supporters had a regression coefficient of 0.717. In other words, for every 1% increase in activists saying they had signed up online for a supporter, we would expect about a 0.7-point increase in the Iowa e-mentum factor. In the model above, the e-mentum factor has a regression coefficient of 0.316, meaning that 0.7-point increase would translate into about a 0.2% increase in final primary vote share. So every 1% increase in supporters signed up online translates into a 0.2% increase in final primary vote share, based on constant results in Iowa.

Note this impact is holding not just the Iowa Vote Share but the Internet tool itself constant. That is, the 0.2% increase in final primary vote share for every percentage point increase in online signup is exclusively due to the interaction between the candidate's online signup and Iowa performance. The 0.2% primary vote share increase is the Iowa e-mentum bonus to the candidate for every 1% of supporters he is capable of signing up online. Were the candidate to win New Hampshire, another e-mentum bonus would be waiting for him or her. (Note that re-running the model with a New Hampshire e-mentum factor leaves Iowa e-mentum significant, while sharpening the Granite State variable's power, as well.)

Put another way, mere success in getting supporters signed up online, driving traffic to one's website or disseminating information on email is not what appears to directly affect primary success. Instead, it is the degree to which the candidate is using these Internet tools, coupled with momentum from a key event which the tools can amplify.

We should also quantify how much Iowa matters to the nomination, holding Internet tools constant, since in the Primary Vote Share model without e-mentum was unable to identify any Iowa impact at all. In the model used to estimate the Iowa e-mentum factor, Iowa's regression coefficient was 0.886, meaning that for every one 1% in Iowa performance, we would expect the Iowa e-mentum factor to increase by about 0.9. Given the e-mentum Primary Vote Share model's 0.316 regression coefficient on the

Iowa e-mentum factor, that 0.9-point increase in the Iowa e-mentum factor would mean an increase in primary vote share of 0.3%.

So according to these two models, every 1% increase in Iowa vote share for a candidate translates into a 0.3% increase in the final primary vote share.

The implication of these two estimates taken together is startling: Not including some measure of e-mentum in a primary election model leaves out a full half of a percentage point (0.2% and 0.3%, for a total of 0.5%) of primary vote impact for every 1% a candidate wins in Iowa and 1% of activists the candidate has signed up online, just based on Caucus-generated e-mentum. What more it leaves out depends on how many other critical junctures like Iowa there are in the race. It goes without saying that there could be many. And as the percentage of activists signing up online, getting contacted by email, and visiting website increases, the unmeasured effects of e-mentum will continue to grow.

Accordingly, theorists may want to factor in e-mentum at any point in a primary model where they currently measure momentum.

4. What Impact Does Iowa Have on New Hampshire? An Increasingly Wild, Wired One

Next, does Iowa affect New Hampshire more, with all the money and supporters to be had online that could never have been gathered in the 8-day sprint from one to the other before the Internet? To answer that question, I modified the New Hampshire Prediction model by adding an Iowa e-mentum factor in place of Iowa Vote Share.⁴⁴ The results of this e-mentum model of New Hampshire Vote Share are presented in Table 4, with the full results included in the Appendix under Model 4.

⁴⁴ Note that I employed the same Iowa online e-mentum factor in both Models 3 and 4, even though it was generated by regressing Online Support and Caucus Vote Share on Primary Vote Share, not New Hampshire Vote Share. If anything, of course, that should understate the size of the explanatory power, which as the reader will find is considerable in the model. Still, in the future, I will be using each dependent variable to create its own e-mentum factor, to be technically accurate.

Table 4: Iowa e-mentum and Exhibition Season Predicting New Hampshire

Variable	Unstandardized Beta	Std. Error	<i>p</i>
IOWA e-MENTUM FACTOR	0.395	0.079	<0.001
<i>Controls</i>			
FUNDRAISING, Candidate's % of active same-party candidates' total money raised, second half of pre-election year	-0.206	0.970	0.039
GALLUP POLLING DATA	-0.094	0.085	0.273
% OF FIELD that candidate represents	-0.013	0.113	0.910
NEW HAMPSHIRE POLLING DATA	0.901	0.110	<0.001
Online support - % of surveyed partisans signed up online	0.000	0.003	0.992
(Constant)	0.000	0.016	0.999
<i>Dependent Variable: New Hampshire Vote Share, %</i>			

R² = 0.860 Adj. R² = 0.846 F = 58.517 Sig. < .001

In the first model of New Hampshire performance, the reader will recall, the Iowa Vote Share factor was statistically significant ($p = .04$), but the impact the first caucus had on the first primary was hard to quantify – somewhere between one sixteenth and a quarter of a percentage point. In this model of New Hampshire performance, by contrast, the Iowa e-mentum factor is highly statistically significant ($p < 0.001$) and the standard error is nowhere near the size of the regression coefficient.

As a result, it is straightforward to quantify how much Iowa matters to the New Hampshire results, holding Internet tools constant. As we noted above, in the Iowa e-mentum factor model, Iowa Vote Share’s regression coefficient was 0.886, meaning that for every one 1% in Iowa performance, the Iowa e-mentum factor would increase by about 0.9. Since the e-mentum New Hampshire Vote Share model above includes an estimate of a 0.395 regression coefficient on the Iowa e-mentum factor, that 0.9-point increase in the Iowa e-mentum factor would mean an increase in primary vote share of about 0.4%.

Thus these models indicate that for every 1% increase in a candidate’s Iowa vote share, he or she would see a 0.4% increase in New Hampshire vote share, even controlling for New Hampshire polling. Given the New Hampshire model without e-mentum, that figure would have been about 0.16%. So even though the model had a statistically

significant Iowa factor, leaving e-mentum out of it understated Iowa's New Hampshire impact by about .24% for every 1% the candidate won in the Caucus.

And how much of e-mentum bonus are candidates getting in New Hampshire based on their Iowa performance? Once more, in the model used to generate the Iowa e-mentum factor, the percentage of online supporters had a regression coefficient of 0.717. In the New Hampshire model above, again, the e-mentum factor has a regression coefficient of 0.395, meaning that a 0.7-point increase in the factor would translate into about a 0.3% increase in final primary vote share. So every 1% increase in supporters signed up online translates into a 0.3% increase in New Hampshire vote share, based on constant results in Iowa.

That is, we can estimate that the New Hampshire e-mentum bonus from Iowa is about a third of a percent in the Granite State for every 1% of activists they have signed up online.

Getting where this is going? Taken together, these estimates mean that leaving an e-mentum measure out of a New Hampshire model drops out over half of a percentage point (0.24% and 0.3%, for a total of 0.54%) in the state for every 1% a candidate wins in Iowa and 1% of activists the candidate has signed up, just because of Caucus-generated e-mentum.

Accordingly, once again, theorists may want to include some e-mentum measurement in New Hampshire models where they currently measure momentum, from Iowa or elsewhere.

V. Discussion

Is technological e-mentum amplifying key events in presidential races? Based on this analysis of Iowa's role vis-à-vis New Hampshire in the primary race, the answer appears to be a resounding yes.

In terms of Iowa's impact on the New Hampshire Primary, use of the Internet appears to give candidates about a 0.3% e-mentum bonus coming out of Iowa for every 1% of activists signed up online, controlling for other factors including the percentage of activists signed up online itself. Also, factoring in e-mentum allows us to estimate that Iowa is in fact having a 0.24% additional impact in New Hampshire vote share for every 1% the candidate wins in the Caucus relative to a model without e-mentum included. We may be badly understating Iowa's impact on New Hampshire by ignoring the budding effects of technology.

In terms of Iowa's impact on a candidate's final Primary Vote Share, technological tools seem to be awarding candidates a 0.2% e-mentum bonus just from the Caucus for every 1% of activists signed up online, again controlling for other factors including the percentage of activists signed up online itself. And building e-mentum into a Primary Vote Share model allows us to estimate that Iowa is having a 0.3% impact for every 1% the candidate wins in the Caucus relative to a model without e-mentum included. In fact, primary models without e-mentum included, the one in this paper included, consistently find that the Caucus has no impact at all on primary results, controlling for New Hampshire and other factors. So we may actually be fundamentally misunderstanding Iowa's impact on the nomination by leaving out this new form of online momentum.

The bottom line is not so much that Iowa matters, but that e-mentum matters. Preliminary tests show that many Internet metrics generate virtually identical results, as well as that e-mentum effects coming out of New Hampshire are just as strong as that coming out of Iowa, if not stronger. So we would do well to explore where else this phenomenon is occurring in presidential races: After Super Tuesday wins? After a successful Convention? After winning a major debate? After winning a general election itself?

One further thought: I would contend that counter-intuitively e-mentum, which may have been the central reason Kerry in 2004 was able to successfully replicate Carter's 1976 Iowa strategy, may also lead to more candidates following McCain and Clark around Iowa to New Hampshire and even beyond.

Why? Because McCain in 2000 and Kerry, Clark and especially Dean in the last race have all experienced the massive jolt that online technology gives to candidates who gain the momentum from major campaign events. If email, fundraising websites and 'blogs raise by orders of magnitude candidates' ability to capitalize on high-profile positive events in their favor, they will realize that they can once again translate a significant, surprising early-state win not just into a few weeks of positive press, but into the devastation of their other competitors, just as it did in Kerry's case. That realization may lead them to skip Iowa with more confidence, knowing a shocking New Hampshire upset – or one in South Carolina? – can overpower a frontrunner with a flood of online resources and shock troops.

On the other hand, e-mentum may also lead candidates to seek a high-tech version of Carter's win as Kerry did, upsetting an Exhibition Season winner in Iowa and surfing the Internet tide to the nomination.

Will all this denigrate Iowa relative to New Hampshire, boost Iowa's role, or put them both at risk to later-state ambushes by candidates knowing they can raise \$50 million in a weekend if they just surprise the public enough with a decisive upset?

It's worth thinking about.

APPENDIX: MODEL RESULTS

Model 1: Exhibition Season, Iowa & New Hampshire Predicting Primary Vote

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.915 ^a	.838	.823	.0909376

a. Predictors: (Constant), New Hampshire results, %, % OF FIELD that candidate represents, National Polling Data, % OF FUNDRAISING, Cand's % of active same-party candidates' total money raised, second half of pre-election year, unfilled, CAUCUS VOTE SHARE, Percent

b. Dependent Variable: Popular Vote % in Primaries

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.309	5	.462	55.849	.000 ^a
	Residual	.447	54	.008		
	Total	2.756	59			

a. Predictors: (Constant), New Hampshire results, %, % OF FIELD that candidate represents, National Polling Data, % OF FUNDRAISING, Cand's % of active same-party candidates' total money raised, second half of pre-election year, unfilled, CAUCUS VOTE SHARE, Percent

b. Dependent Variable: Popular Vote % in Primaries

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.027	.024		1.122	.267
	CAUCUS VOTE SHARE, Percent	.153	.133	.113	1.152	.254
	% OF FIELD that candidate represents	-.306	.171	-.138	-1.791	.079
	% OF FUNDRAISING, Cand's % of active same-party candidates' total money raised, second half of pre-election year, unfilled	-.341	.126	-.241	-2.701	.009
	National Polling Data	.637	.102	.541	6.225	.000
	New Hampshire results, %	.829	.124	.620	6.678	.000

a. Dependent Variable: Popular Vote % in Primaries

Model 2: Iowa and the Exhibition Season Predicting New Hampshire

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.854 ^a	.729	.708	.0862540

- a. Predictors: (Constant), NEW HAMPSHIRE POLL SUPPORT before Iowa Caucus, filled using Gallup (f), % of Fundraising (f), and % of the Field, CAUCUS VOTE SHARE, Scaled Percent, as reported by Des Moines Register but factoring in undecided and uncommitted proportionally, % OF FIELD that candidate represents, % of FUNDRAISING TOTAL, Scaled, Filled and Normed - Candidate's % of active same-party candidates' total money raised, second half of pre-election year, scaled, filled using % of the field, Af-Am, and preauc unfilled, normed to 100% per cycle, GALLUP POLL SUPPORT - % based on raw Gallup totals, scaled to include only candidates reaching the Caucus, then filled using % of field and % fundraising, then normed back to 100% for each field of candidates
- b. Dependent Variable: New Hampshire results, %

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.263	5	.253	33.960	.000 ^a
	Residual	.469	63	.007		
	Total	1.732	68			

- a. Predictors: (Constant), NEW HAMPSHIRE POLL SUPPORT before Iowa Caucus, filled using Gallup (f), % of Fundraising (f), and % of the Field, CAUCUS VOTE SHARE, Scaled Percent, as reported by Des Moines Register but factoring in undecided and uncommitted proportionally, % OF FIELD that candidate represents, % of FUNDRAISING TOTAL, Scaled, Filled and Normed - Candidate's % of active same-party candidates' total money raised, second half of pre-election year, scaled, filled using % of the field, Af-Am, and preauc unfilled, normed to 100% per cycle, GALLUP POLL SUPPORT - % based on raw Gallup totals, scaled to include only candidates reaching the Caucus, then filled using % of field and % fundraising, then normed back to 100% for each field of candidates
- b. Dependent Variable: New Hampshire results, %

Model 2 continued next page

Model 2, cont.: Exhibition Season and Iowa Predicting New Hampshire

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.003	.022		.118	.906
	% OF FIELD that candidate represents	.079	.154	.046	.510	.612
	% of FUNDRAISING TOTAL, Scaled, Filled and Normed - Candidate's % of active same-party candidates' total money raised, second half of pre-election year, scaled, filled using % of the field, Af-Am, and precauc unfilled, normed to 100% per cycle	-.089	.125	-.080	-.713	.478
	GALLUP POLL SUPPORT - % based on raw Gallup totals, scaled to include only candidates reaching the Caucus, then filled using % of field and % fundraising, then normed back to 100% for each field of candidates	-.107	.113	-.113	-.944	.349
	CAUCUS VOTE SHARE, Scaled Percent, as reported by Des Moines Register but factoring in undecided and uncommitted proportionally	.155	.074	.182	2.094	.040
	NEW HAMPSHIRE POLL SUPPORT before Iowa Caucus, filled using Gallup (f), % of Fundraising (f), and % of the Field	.937	.152	.856	6.163	.000

a. Dependent Variable: New Hampshire results, %

Model 3: Iowa e-mentum and New Hampshire Predicting Primary Vote

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.917 ^a	.842	.825	.0894364

a. Predictors: (Constant), Online support, partisans - % of all partisans signed up as cand's supporters online, New Hampshire results, %, % OF FIELD that candidate represents, GALLUP POLL SUPPORT - % based on raw Gallup totals, scaled to include only candidates reaching the Caucus, then filled using % of field and % fundraising, then normed back to 100% for each field of candidates, % of FUNDRAISING TOTAL, Scaled, Filled and Normed - Candidate's % of active same-party candidates' total money raised, second half of pre-election year, scaled, filled using % of the field, Af-Am, and precauc unfilled, normed to 100% per cycle, Iowa online e-mentum - Combined Iowa Caucus Vote Share and % of Partisans Signed up Online Explanatory Power

b. Dependent Variable: Popular Vote % in Primaries

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.380	6	.397	49.585	.000 ^a
	Residual	.448	56	.008		
	Total	2.828	62			

a. Predictors: (Constant), % of FUNDRAISING TOTAL, Scaled, Filled and Normed - Candidate's % of active same-party candidates' total money raised, second half of pre-election year, scaled, filled using % of the field, Af-Am, and precauc unfilled, normed to 100% per cycle, Online support, partisans - % of all partisans signed up as cand's supporters online, % OF FIELD that candidate represents, New Hampshire results, %, GALLUP POLL SUPPORT - % based on raw Gallup totals, scaled to include only candidates reaching the Caucus, then filled using % of field and % fundraising, then normed back to 100% for each field of candidates, Iowa online e-mentum - Combined Iowa Caucus Vote Share and % of Partisans Signed up Online Explanatory Power

b. Dependent Variable: Popular Vote % in Primaries

Model 3 continued next page

Model 3, cont.: Iowa e-mentum and New Hampshire Predicting Primary Vote

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.002	.023		-.084	.933
	Iowa online e-mentum - Combined Iowa Caucus Vote Share and % of Partisans Signed up Online Explanatory Power New Hampshire results, %	.316	.129	.231	2.441	.018
	GALLUP POLL SUPPORT - % based on raw Gallup totals, scaled to include only candidates reaching the Caucus, then filled using % of field and % fundraising, then normed back to 100% for each field of candidates	.681	.129	.508	5.270	.000
	Online support, partisans - % of all partisans signed up as cand's supporters online	.708	.108	.578	6.530	.000
	% OF FIELD that candidate represents	-.001	.005	-.010	-.182	.856
	% of FUNDRAISING TOTAL, Scaled, Filled and Normed - Candidate's % of active same-party candidates' total money raised, second half of pre-election year, scaled, filled using % of the field, Af-Am, and preauc unfilled, normed to 100% per cycle	-.245	.161	-.112	-1.517	.135
		-.453	.133	-.312	-3.401	.001

a. Dependent Variable: Popular Vote % in Primaries

Model 4: Iowa e-mentum and Exhibition Season Predicting New Hampshire

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.928 ^a	.860	.846	.0622004

a. Predictors: (Constant), NEW HAMPSHIRE POLL SUPPORT before Iowa Caucus, filled using Gallup (f), % of Fundraising (f), and % of the Field, Online support, partisans - % of all partisans signed up as cand's supporters online, % OF FIELD that candidate represents, Iowa online e-mentum - Combined Iowa Caucus Vote Share and % of Partisans Signed up Online Explanatory Power, % of FUNDRAISING TOTAL, Scaled, Filled and Normed - Candidate's % of active same-party candidates' total money raised, second half of pre-election year, scaled, filled using % of the field, Af-Am, and pre-cauc unfilled, normed to 100% per cycle, GALLUP POLL SUPPORT - % based on raw Gallup totals, scaled to include only candidates reaching the Caucus, then filled using % of field and % fundraising, then normed back to 100% for each field of candidates

b. Dependent Variable: New Hampshire results, %

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.358	6	.226	58.517	.000 ^a
	Residual	.221	57	.004		
	Total	1.579	63			

a. Predictors: (Constant), NEW HAMPSHIRE POLL SUPPORT before Iowa Caucus, filled using Gallup (f), % of Fundraising (f), and % of the Field, Online support, partisans - % of all partisans signed up as cand's supporters online, % OF FIELD that candidate represents, Iowa online e-mentum - Combined Iowa Caucus Vote Share and % of Partisans Signed up Online Explanatory Power, % of FUNDRAISING TOTAL, Scaled, Filled and Normed - Candidate's % of active same-party candidates' total money raised, second half of pre-election year, scaled, filled using % of the field, Af-Am, and pre-cauc unfilled, normed to 100% per cycle, GALLUP POLL SUPPORT - % based on raw Gallup totals, scaled to include only candidates reaching the Caucus, then filled using % of field and % fundraising, then normed back to 100% for each field of candidates

b. Dependent Variable: New Hampshire results, %

Model 4 continued next page

Model 4, cont.: Iowa e-mentum and Exhibition Season Predicting New Hampshire

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.000	.016		.001	.999
	Iowa online e-mentum - Combined Iowa Caucus Vote Share and % of Partisans Signed up Online Explanatory Power NEW HAMPSHIRE POLL SUPPORT before Iowa Caucus, filled using Gallup (f), % of Fundraising (f), and % of the Field	.395	.079	.389	5.010	.000
	% of FUNDRAISING TOTAL, Scaled, Filled and Normed - Candidate's % of active same-party candidates' total money raised, second half of pre-election year, scaled, filled using % of the field, Af-Am, and preauc unfilled, normed to 100% per cycle	.901	.110	.859	8.188	.000
	GALLUP POLL SUPPORT - % based on raw Gallup totals, scaled to include only candidates reaching the Caucus, then filled using % of field and % fundraising, then normed back to 100% for each field of candidates	-.206	.097	-.190	-2.111	.039
	% OF FIELD that candidate represents	-.094	.085	-.103	-1.106	.273
	Online support, partisans - % of all partisans signed up as cand's supporters online	-.013	.113	-.008	-.114	.910
		.000	.003	.001	.010	.992

a. Dependent Variable: New Hampshire results, %

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