The Motivating Power of Under-Confidence: “The Race is Close But We’re Losing”
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The Motivating Power of Under-Confidence:

“The race is close but we’re losing”

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Abstract

(Words = 149)

Should political campaigns in close races communicate that they may win (over-confidence) or that they may lose (under-confidence)? In six studies (three survey experiments, two field experiments, and one archival study) we demonstrate the motivating power of under-confidence. While uncommitted voters show bandwagon effects (prefer candidates who are barely winning as opposed to barely losing), supporters show the opposite (greater motivation when their preferred candidate is barely losing as opposed to barely winning). Two fundraising email field experiments (1M+ observations) show a large effect size: emphasizing polls that show that a preferred candidate was barely losing raised 55% more than emphasizing polls that show that he was barely winning. Emails collected during the 2012 US Presidential election reflect this insight: they were more likely to report that preferred candidates were barely losing than that preferred candidates were barely winning. Sometimes leaders are more effective appearing under-confident rather than over-confident.
On July 15, 1979, US President Jimmy Carter gave what some historians regard as the most important speech of his presidency (Morris, 1996). He spoke to the American people from the oval office about what he described as a national “crisis of confidence.” The speech became known as the “malaise” speech. It was against this pessimistic assessment of the national mood that Ronald Reagan pitched his optimistic campaign message in 1980. Reagan offered a more confident vision that carried him to electoral victory. Indeed, analysis of speeches by US presidential candidates suggest that optimism may predict subsequent electoral victory (Zullow & Seligman, 1990).

The theory that confidence leads to success is popular, both among the lay public and in the field of positive psychology. Books from “Think and grow rich” (Hill, 1972) to “The secret” (Byrne, 2006) have touted the benefits of optimistic thinking on subsequent life outcomes. Researchers, likewise, have concluded that optimism and positive emotions are good for you (Lyubomirsky, King, & Diener, 2005; Scheier & Carver, 1993). In particular, displaying optimism and confidence is useful in social settings, where it can help persuade others that you know what to do and that they should support you (Radzwick & Moore, 2011; Sniezek & Van Swol, 2001). More confident people often advance to positions of status and leadership for exactly this reason (Anderson, Brion, Moore, & Kennedy, 2012). The implication for would-be leaders is that they should express more confidence than their rivals.

In this paper, we consider the alternative perspective. We test the possibility that greater confidence can lead to reduced commitment and reduced effort among supporters. If you are convinced that your side is so strong that victory is assured, then additional effort is not necessary. Those who envision a bright future might actually be less likely to succeed if their confidence undermines their willingness to work to achieve it (Oettingen & Mayer, 2002;
Oettingen, 1996). On the other hand, those who envision how things could go wrong may be more motivated and better prepared to effectively meet adversity. Research on defensive pessimism highlights the motivating potential of anticipating disaster (Norem & Cantor, 1986). Avoiding a possible loss can be more motivating than pursuing a possible gain (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001; Kahneman & Tversky, 1979; Rozin & Royzman, 2001).

This paper tests these opposing predictions for the effects of confidence. Are people more motivated to support a political candidate who is ahead in the polls or who is trailing the polls? If candidates want to maximize supporters’ motivation to donate to the campaign, volunteer for the campaign, or get out the vote, what should they say about whether they are winning or losing? In five studies, we examine how the belief that a candidate is currently ahead vs. behind affects people’s motivation to support the candidate by volunteering, contributing, or voting. We report three online survey experiments on Mechanical Turk, one archival study examining all emails sent by the campaigns of President Barack Obama and Governor Mitt Romney in the 2012 U.S. Presidential election, and one fundraising field experiment in the 2014 Florida Governor’s race.

**Study 1: Underdog vs. Bandwagon Effects**

Study 1 examines a moderator of confidence’s effect on motivation. Consistent with the power of defensive pessimism, we hypothesized that people who are committed to a candidate would become more motivated after learning that the candidate is behind in the polls. However, for people who are uncommitted, learning that a candidate is behind in the polls would not increase motivation to support the candidate, and could even undermine people’s support for a candidate due to herding or bandwagon effects (Banerjee, 1992; Gerber & Rogers, 2009; Mehrabian, 1998). Our hypothesis, then, is an interaction between voter commitment to a candidate and confidence in that candidate’s likelihood of victory.
Method

Participants. We opened the survey to 400 participants on Amazon Mechanical Turk (Buhrmester, Kwang, & Gosling, 2011). We selected this sample size ex-ante based on a complete guess for how big our sample size needed to be in order to detect the hypothesized interaction effect. We restricted the sample to those with Internet Protocol addresses in the United States and paid $.50 per respondent. For this and all our studies, we report how we determined our sample size, all data exclusions (if any), all conditions, and all measures.

Immediately following the consent form and before encountering the actual experimental materials, we included an attention check. Our survey ejected participants who failed the attention check and did not allow them to continue. They did not get paid and are not included in subject counts. The final sample includes 402 people.

Design and procedure. The experiment had a 2 (order) X 2 (winning vs. losing) factorial design. Each participant read the same four news items about a political candidate named Kendall Jenkins:

1. Kendall Jenkins served in the Peace Corps for two years after graduating from college
2. Jenkins founded a software company that was later sold to Microsoft
3. Jenkins served as mayor for a town, and that during Jenkins’s time as mayor, the city budget went from a $2 million annual deficit to a $1 million annual surplus
4. Jenkins worked successfully with people across the political spectrum to get things done

After each news item, they answered: How would it affect the chances that you would vote for the candidate? (on a 5-point scale from Much less likely to Much more likely).

A fifth news item presented the candidate’s current standing in the polls. Half of participants read that Jenkins was losing to the other candidate in the race, 47% to 48% (with 5%
of voters undecided), and again reported how this would affect their chances of voting for the candidate (on the same 5-point scale). The other half of participants learned that Jenkins was ahead, 48% to 47%. This was the manipulation of confidence in winning vs. losing.

Half of participants encountered this fifth item last in the series, and the other half encountered it first. This manipulation of order was intended to vary commitment to the candidate. Given that the four news items were positive, we expected that participants who got them first would thereby become more committed to the candidate when they learned the polling results.

Results

On average, participants rated the four news items at 3.96, significantly above the scale midpoint of 3, \( t(401)=41.01, p < 0.001 \). As expected, these news items were positive, and increased participants’ support for the candidate.

As for participants’ response to the news that the candidate was either winning or losing in the polls, a 2 X 2 ANOVA reveals a significant main effect of order, \( F(398, 1)=7.56, p=0.006 \). This is because support was stronger after having read four positive news items about the candidate. This main effect is qualified by the hypothesized interaction between winning/losing and news order, \( F(398, 1)=4.87, p=0.028 \). This interaction is illustrated in Figure 1.
Figure 1. Being Committed to a Candidate Moderates Motivating Effect of Winning/Losing

![Bar graph showing Rated support for committed and uncommitted participants in winning and losing scenarios.]

**Discussion**

When participants learn that their favored candidate is just behind in the polls they *increased* their interest in supporting their favored candidate. However, when participants did not yet know anything about the candidate – and were thus uncommitted – learning that a candidate was trailing in the polls *decreased* their tendency to support the candidate.

**Study 2:**

**Winning/Losing and Closeness of an Election Affect Volunteer and Donation Pledges**

A one percentage point lead is likely to be within the margin of error for most opinion polls. Nevertheless, in Study 1 such a small difference affected participants’ inclination to support their preferred candidate. The small difference between the candidates in the poll leaves open the question of whether the beneficial effect of losing holds when the situation is more dire. Would learning that one’s candidate was far behind in the polls still increase motivation among...
supporters? Study 2 sought to examine this, as well as to conceptually replicate Study 1’s finding that people are more motivated to act in support of a candidate they already prefer if the candidate is barely losing relative to barely winning.

Method

Participants. We opened the survey to 300 people on Mechanical Turk and wound up with a final sample of 305. They were located in the US and paid $0.50.

Design. This study had a 2 (winning vs. losing) X 2 (close vs. blowout) design. Participants were told to imagine they were supporting a political candidate running for office. They then read one of the following messages: “It’s close, but we’re losing”; “It’s close, but we’re winning”; “It’s a blowout, but we’re losing”; or “It’s a blowout, but we’re winning.”

Participants then answered two questions:

1. “How likely would you be to volunteer for the campaign if you were asked?”

2. “How likely would you be to donate money to the campaign if you were asked?”

They responded to both questions on the same five point scale: Very Unlikely, Unlikely, Undecided, Likely, Very Likely.

Results

A multivariate analysis of variance (MANOVA) reveals that there is a significant main effect of the reported closeness of the race on likelihood to volunteer and donate, $F(2,301)=10.4$, $p<0.001$. Participants who learned the race was close ($M=2.69$, $SD=1.1$) were more likely to say they would volunteer than participants who were told the race was a blowout ($M=2.29$, $SD=0.88$), $F(1, 302)=12.59$, $p<0.001$. Similarly, participants were more likely to claim they
would donate money when the race was close \((M=2.47, SD=1.2)\) than a blowout \((M=1.94, SD=0.93)\), \(F(1, 302)=19.77, p<0.001\).

There was a significant main effect of the candidate’s lead in the race on likelihood to volunteer and donate, \(F(2,301)=5.32, p=0.005\). There was a non-significant difference between participants who were told the candidate was losing versus those who were told the candidate was winning on likelihood to volunteer \((M=2.54, SD=1.04 \text{ vs. } M=2.44, SD=0.99), F(1,302)=0.8, p=0.372\). However, participants were significantly more likely to donate money when the candidate was losing compared to when the candidate was winning \((M=2.39, SD=1.19 \text{ vs. } M=2.03, SD=0.98), F(1,302)=9.21, p=0.003\).

There was a significant interaction of reported closeness of the race and the candidate’s lead on likelihood to volunteer and donate, \(F(2,301)=5.12, p=0.006\). In regards to volunteering, participants in the "close but losing" condition were more likely to volunteer \((M=2.91, SD=1.09)\) than participants in the "close but winning" condition \((M=2.47, SD=1.08), F(1, 302)=7.65, p=0.006\). Participants in the "blowout but winning" condition were marginally more likely to volunteer \((M=2.41, SD=0.9)\) than those in the "blowout but losing" condition \((M=2.17, SD=0.85), F(1,302)=2.26, p=0.13\).

In terms of likelihood to donate money, participants in the "close but losing" condition were more likely to donate \((M=2.82, SD=1.22)\) than participants in the "close but winning" condition \((M=2.13, SD=1.08), F(1,302)=16.44 , p<0.001\). Participants in the "blowout but winning" condition donated at a similar rate \((M=1.92, SD=0.86)\) to those in the "blowout but losing" condition \((M=1.96, SD=0.99), F(1,302)=0.06, p=0.813\).
Discussion

Study 2 shows that people are more motivated to support their preferred candidate when they believe that the election is close compared to when it is a blowout. And when the election is close, people are more motivated to support their preferred candidate when s/he is losing.

Study 3: Email Field Experiments

Study 1 and Study 2 show that people self-report being more willing to act in support of a hypothetical candidate they support if s/he is in a close race, but losing. Study 3 extends these findings in two ways. First, it tests whether conveying low confidence can be an effective campaign communication strategy. Study 1 and Study 2 showed that people are motivated by barely losing, but what happens when that information is strategically communicated by a campaign? Second, Study 3 involves two field experiments examining the external validity of the motivating effect of losing. We report two separate email fundraising experiments in the 2014 Florida gubernatorial election, as well as a meta-analysis combining the two experiments.

Study 3a

Method

Working with a leading online fundraising consultancy (Anne Lewis Strategies, Inc), we developed two emails that the Democratic Governors Association (DGA) distributed to its entire fundraising email list. The DGA email fundraising list contained past donors and prospective donors who the DGA believed were supporters of Democratic candidates and potential donors of Democratic Gubernatorial candidates. The emails attempted to raise money for the Democratic Governors Association, focusing on the 2014 Florida gubernatorial race between Democratic candidate Charlie Crist and Republican Governor Rick Scott. The emails were sent on June 19\textsuperscript{th},
2014. Half of recipients were randomly assigned to receive the Winning condition email. It read:

> Rick Scott is LOSING in three straight polls!!! Florida’s the mother of ALL swing states and we’re primed to KNOCK OUT the king of voter suppression and his allies – but only if you GIVE NOW! Donate in the next 24 HOURS to get your gift DOUBLED!

The other half of recipients were randomly assigned to receive the Losing condition email. It read:

> We’ve fallen behind Rick Scott in the latest poll!!! Florida’s the mother of ALL swing states and we need more resources to KNOCK OUT the king of voter suppression and his allies – but you have to GIVE NOW! Donate in the next 24 HOURS to get your gift DOUBLED!

All other content in the two emails was identical. See Supplemental Online Materials for complete reproductions of both emails and for the actual polls referenced in the email messages.

**Participants.** 31,605 past donors were randomly assigned to the Winning condition and 31,654 past donors were randomly assigned to the Losing condition. 301,372 prospective donors were randomly assigned to the Winning condition and 301,353 prospective donors were randomly assigned to the Losing condition.

**Results**

**“Opened” Emails.** Each email includes images that recipients can choose to download. There are a variety of ways that these images can be downloaded (i.e., one’s email client could automatically download images, one’s email client could download images if the recipient views
the email for a set period of time, etc.). One way for images to be downloaded is by recipients choosing to open the email in their email client so that they can read the entirety of the email message. This is referred to as “opening” the email, even though some recipients read the email and never download the images, while others download the images but never read the email. As such, differences in email “opening” reflect a conservative test of whether the initial text in the body of the email motivated recipients to read the rest of the email.

Past donors in the Winning condition (16.69%) opened the email significantly less than past donors in the Losing condition (17.62%), *t*(63,257)=3.12, *p*=0.002. Similarly, prospective donors in the Winning condition (11.86%) opened the email significantly less than those in the Losing condition (12.06%), *t*(602,723)=2.39, *p*=0.017. Using logistic regression, we control for donor status to assess the effect of how the message was framed (winning or losing) across both past donors and prospective donors. We find that recipients in the Winning condition (12.31%) are less likely to open the email than those in the Losing Condition (12.58%), (log odds ratio=-0.024, *p*=0.001).

**Click-through.** Only .39% of past donors in the Winning condition clicked on the link in the email to go to the donation page. This was significantly less than in the Losing condition (.51%), *t*(63,257)=2.421, *p*=0.016. Similarly, .13% of prospective donors in the Winning condition and .16% in the Losing condition clicked on the link, *t*(602,723)=2.906, *p*=0.004. Controlling for donor status, participants in the Winning condition (.16%) are less likely to click on the link to donate than those in the Losing condition (.2%), (log odds ratio= -0.217, *p*<0.001)

**Donations.** Past donors in the Winning condition (.25%) donated less often than past donors in the Losing condition (.37%), *t*(63,257)=2.694, *p*=0.007. Prospective donors in the Winning condition (.0086%) donated less often than those in the Losing condition (.015%),


Amount Donated. A total of 80 past donors in the Winning condition donated $1,799, averaging $22.49 per donation. A total of 118 past donors donated $3,185.09 in the Losing condition, averaging $26.76 per donation. This means the losing message increased the number of donations among past donors by 50%, and raised 77% more total money. The Losing email raised marginally more money from past donors than the Winning email, \( t(63,257)=1.877, p=0.061 \). A total of 26 prospective donors in the Winning condition donated $380, averaging $14.62 per donation. A total of 47 prospective donors donated $545 in the Losing condition, averaging $11.60 per donation. This means the losing message increased the number of donations among prospective donors by 85%, and raised 45% more total money. Though substantively meaningful, this difference in total money raised does not attain statistical significance, \( t(602,723)=0.954, p=0.34 \). Using OLS regression, controlling for donor status, we find that Winning condition raised less money than the Losing condition (\( b_2=-0.005, p=0.041 \)).

See the Supplemental Online Materials for a complete account of how the donation files were integrated into a master file.

Study 3b

Method

Study 3b was a replication of Study 3a. The DGA sent fundraising emails to the same list of recipients eleven days after Study 3a. Recipients were randomly assigned to receive one of two conditions. As with Study 3a, in Study 3b both conditions involved fundraising emails that were identical except for minor changes referencing whether the Democratic candidate, Charlie
Crist, was winning or losing against the Republican candidate, Rick Scott. The Winning condition email read:

**BREAKING: A new SurveyUSA poll has Democrats LEADING Rick Scott in Florida, 44-40!!! Now is THE moment to DETHRONE the king of voter suppression and his allies in key battlegrounds.**

[NAME],

*We have to protect this lead! If we let Scott overtake us, we’ll lose this November and risk the White House in 2016 – that’s a slippery slope we CAN’T afford.*

*The ONLY way to protect our lead and win is to get a team on the ground to rally our Democratic supporters and protect every single vote. Scott cheated his way into office before – we CAN’T let him do it again.*

The Losing condition email read:

**BREAKING: A new SurveyUSA Poll has Democrats LOSING to Rick Scott in Florida, 41-42!!! Now is THE moment to DETHRONE the king of voter suppression and his allies in key battlegrounds.**

[NAME],

*If we fall further behind in Florida and other key battlegrounds, we’ll lose this November and risk the White House in 2016 – that’s a slippery slope we CAN’T afford.*

*The ONLY way to turn this around is to get a team on the ground to rally our Democratic supporters and protect every single vote. Scott cheated his way into office before – we CAN’T let him and other Republicans do it again.*
All other content in the two emails was identical. See Supplemental Online Materials for complete reproductions of both emails and for the actual polls referenced in the email messages.

Results

Participants. 31,726 past donors were randomly assigned to the Winning condition and 31,775 past donors were randomly assigned to the Losing condition. 298,569 prospective donors were randomly assigned to the Winning condition, and 298,472 prospective donors were randomly assigned to the Losing condition.

“Opened” Emails. Past donors in the Winning condition (18.03%) opened the email marginally less than past donors in the Losing condition (18.54%), \( t(63,499) = 1.653, p = 0.098 \). Similarly, prospective donors in the Winning condition (11.42%) opened the email significantly less than those in the Losing condition (11.67%), \( t(597,039) = 3.087, p = 0.002 \). Using logistic regression, we control for donor status to assess the effect of how the message was framed (winning or losing) across both past donors and prospective donors. Recipients in the Winning condition (12.05%) are less likely to open the email than those in the Losing Condition (12.33%), (log odds ratio = -0.026, \( p = 0.001 \)).

Click-through. Only .47% of past donors in the Winning condition clicked on the link in the email to go to the donation page. This was significantly less than in the Losing condition (.63%), \( t(63,499) = 2.8305, p = 0.005 \). Similarly, .23% of prospective donors in the Winning condition and .27% in the Losing condition clicked on the link, \( t(597,039) = 3.057, p = 0.002 \). Controlling for donor status, participants in the Winning condition (.25%) are less likely to click on the link to donate than those in the Losing condition (.30%), (log odds ratio = -0.187, \( p < 0.001 \)).
Donations. Past donors in the Winning condition (.29%) donated less often than past donors in the Losing condition (.40%), \( t(63,499)=2.22, p=0.026 \). Prospective donors in the Winning condition (.016%) donated less often than those in the Losing condition (.024%), \( t(597,039)=2.11, p=0.035 \). Controlling for donor status, recipients in the Winning condition (.04%) are less likely to donate than those in the Losing condition (.06%), (log odds ratio=-0.334, \( p=0.002 \)).

Amount Donated. A total of 93 past donors in the Winning condition donated $1,954.50, averaging $21.02 per donation. A total of 126 past donors donated $3,457 in the Losing condition, averaging $27.44 per donation. This means the losing message increased the number of donations among past donors by 33%, and raised 76% more total money. The Losing email raised more money from past donors than the Winning email, \( t(63,499)=2.007, p=0.045 \). A total of 48 prospective donors in the Winning condition donated $935, averaging $19.48 per donation. A total of 71 prospective donors donated $936 in the Losing condition, averaging $13.18 per donation. This means the losing message increased the number of donations among prospective donors by 46%, and raised about the same total amount of money. There is no significant difference between these the two conditions in amount donated \( t(597,039)=0.0039, p=0.997 \). Using OLS regression, controlling for donor status, we find that Winning condition raised marginally less money than the Losing condition \( (b_2=-0.005, p=0.067) \). See the Supplemental Online Materials for a complete account of how the donation files were integrated into a master file.

Combined Analysis of Study 3a and Study 3b

Study 3a and Study 3b are conceptually nearly identical to each other. To analyze them together aggregate the participants from both experiments creating a total of 1,337,234
participant observations. Nearly all participants were in both experiments so we cluster analyses at the individual level. Specifically, we conduct OLS regressions when Amount Donated is the dependent variable, clustering at the individual-level using robust standard errors. We conduct Logit regressions when Opened Emails and Donations are the dependent variables, clustering at the individual-level using robust standard errors.

Results

Participants. In this analysis 63,331 past donors were randomly assigned to the Winning condition and 63,429 past donors were randomly assigned to the Losing condition. 599,941 prospective donors were randomly assigned to the Winning condition and 599,825 prospective donors were randomly assigned to the Losing condition. The randomization procedure used for Study 3a was repeated for Study 3b, the universes are statistically orthogonal, meaning that an equal number of recipients are allocated across the four possible combinations of emails (Study 3a: Losing and Study 3b: Winning; Study 3a: Losing and Study 3b: Losing; Study 3a: Winning and Study 3b: Winning; Study 3a: Winning and Study 3b: Losing), Chi-Square (1, 1,326,526)=0.0046, p=0.95. Note that some recipients opted-out after the 6/19 email, and others signed up before the 6/30 email. This involves a small fraction of total recipients, but explains why the total sample size for this Chi-square test is smaller than the total number of observations in this meta-analysis.

“Opened” Emails. Past donors in the Winning condition (17.36%) opened the email significantly less than past donors in the Losing condition (18.08%), (log odds ratio=-0.049, p=0.001). Similarly, prospective donors in the Winning condition (11.64%) opened the email significantly less than those in the Losing condition (11.86%), (logs odds ratio=-0.022, p<0.001). We control for donor status to assess the effect of how the message was framed (winning or
losing) across both past donors and prospective donors. We find that recipients in the Winning condition (12.18%) are less likely to open the email than those in the Losing Condition (12.46%), (log odds ratio=-0.0255, p<0.001.)

**Click-through.** Only 0.43% of past donors in the Winning condition clicked on the link in the email to go to the donation page. This was significantly less than in the Losing condition (.57%), (log odds ratio=-0.299, p<0.001). Similarly, 0.18% of prospective donors in the Winning condition and .21% in the Losing condition clicked on the link, (log odds ratio=-0.172, p<0.001). Controlling for donor status, participants in the Winning condition (0.20%) are less likely to click on the link to donate than those in the Losing condition (0.24%), (log odds ratio=-0.199, p<0.001)

**Donations.** Past donors in the Winning condition (.27%) donated less often than past donors in the Losing condition (.38%), (log odds ratio=-0.343 p=0.001). Prospective donors in the Winning condition (.012%) donated less often than those in the Losing condition (.020%), (log odds ratio=.467, p=0.002). Controlling for donor status, recipients in the Winning condition (.037%) are less likely to donate than those in the Losing condition (.055%), (log odds ratio=-0.382, p<0.001).

**Amount Donated.** A total of 173 past donors in the Winning condition donated $3,753.50, averaging $21.70 per donation. A total of 244 past donors donated $6,615.09 in the Losing condition, averaging $27.11 per donation. This means the losing message increased the number of donations among past donors by 41%, and raised 76.2% more total funds. The Losing email raised significantly more money from past donors than the Winning email, (b₂=-0.45, p=0.006). A total of 74 prospective donors in the Winning condition donated $1,315, averaging $17.77 per donation. A total of 118 prospective donors donated $1,481 in the Losing condition,
averaging $12.55 per donation. This means the losing message increased the number of
donations among prospective donors by 60%, and raised 13% more total money. Though
substantively meaningful, this difference in total money raised does not attain statistical
significance, \( (b_2 = -0.00027, p=0.066) \). Controlling for donor status, we find that the Winning
condition raised less money than the Losing condition ($5,068.50 versus $8,096.09), \( (b_2=-
0.0045, p=0.01) \).

Discussion

Emphasizing that an election is close but that one’s preferred candidate is losing
increases the proportion of recipients that pay attention to an email, the proportion of recipients
that clicks on the link to donate in the email, the proportion of recipients that actually donates,
and how much money the email raises. Figure 2 shows that these effects are sizable and
consequential.
Study 4: Lay Beliefs

The previous studies demonstrate the motivating power of low confidence. Study 1 and Study 2 show that Amazon’s Mechanical Turk participants are more motivated to act when their preferred candidate is barely losing, rather than barely winning. Study 4 explores whether this same worker pool can anticipate the motivating power of campaign under-confidence.
Method

Participants. We conducted this study on Amazon’s Mechanical Turk with 110 participants. We selected this sample size ex-ante based on a complete guess for how big our sample size needed to be in order to detect if participants had an intuition. As before, we restricted the sample to those with Internet Protocol addresses in the United States and paid $.50 per respondent. Average age was 33.6 years old and 35% of respondents were women. Immediately following the consent form and before encountering the actual experimental materials, we asked participants to enter their identification code. If they had participated in one of the previous studies on this topic we did not allow them to continue. They did not get paid and are not included in subject counts.

Design and procedure. Participants read about the design of Study 2 and learned that the participants in that study were assigned to one of two conditions (close but losing, close but winning) or four conditions (close but losing, close but winning, blowout and winning, blowout and losing). Participants were told that Study 2’s participants were asked how likely they were to support the campaign by volunteering and by donating. Participants were asked to predict which message was most motivating for volunteering and for donating. They earned a bonus of $0.10 for each correct prediction. We randomized whether they predicted volunteering or donation first, and since that did not affect results it is not discussed again.

Results

Participants who were told about the two messages leaned, nonsignificantly, towards predicting that the “it’s close, but we’re losing” message (57%) would motivate participants to volunteer and donate (the results were identical for the two measures) more than the “it’s close and we’re winning” message (43%), Chi Square (1, N=56)=1.143, p=0.29.
Participants who were told about the four messages predicted that the “it’s close, but we’re losing” (39%) and the “it’s close but we’re winning” messages (43%) would motivate volunteering more than the “it’s a blowout but we’re losing” (7%) and “it’s a blowout but we’re winning” (11%) messages, Chi Square (1, N=54)=21.41, p<0.001. There is no significant difference between the fraction that predicted that the “it’s close, but we’re losing” would dominate and the fraction that predicted that the “it’s close but we’re winning” message would dominate, Chi Square (1, N=44)=0.09, p=0.76.

Participants also predicted that the “it’s close, but we’re losing” message (39%) and the “it’s close, but we’re winning” message (43%) would motivate donating more than the “it’s a blowout but we’re losing” (0%) and the “it’s a blowout but we’re winning messages” messages (15%), Chi Square (1, N=54)=26.74, p<0.001. There is no significant difference between the fraction that predicted that the “it’s close, but we’re losing” would dominate and the fraction that predicted that the “it’s close but we’re winning” message would dominate, Chi Square (1, N=46)=0.78, p=0.38.

Discussion

Participants did not have a strong intuition about the motivating power of their preferred candidate being barely behind in polls. That said, they did show a strong (correct) intuition that elections that are close would generate more support than campaigns that are not.

Study 5: Do Campaigns Know?

Presenting low confidence to a candidate’s supporters motivates action to support the candidate. Study 5 explores whether actual political communications to supporters reflect this insight.
Method

We obtained copies of 6,894 unique email messages sent out to supporters during the 2012 US Presidential campaign. This was the full archive obtained from the nonprofit group ProPublica.org. The archive was called “Message Machine: Reverse Engineering the 2012 Campaign.” The archive was described the following way, “Political campaigns send many variations of each email to supporters. We've been collecting emails from political campaigns and tracking the variations. Here you can explore those emails. You can be a part of this project by forwarding political emails you get to emails@messagemachine.propublica.org.” The archive contained emails from the presidential campaigns as well as their advocates (i.e., national committees). Research assistants who were blind to the experimental hypotheses coded all messages on two dimensions. The first dimension was whether the message emphasized that the election was close (-1) or a blowout(1). The research assistants were told that a message conveyed that the election was close if: Messages that provided polling results with small margins, mentioned that the race was “tightening,” or stated that the election would “come down to a handful of votes.” The research assistants were told that a message conveyed that the election was a blowout if: Messages that made it seem as though victory was definite. The research assistants were told to leave uncoded messages that made no mention of how close the race was.

The second coding dimension captured whether the message claimed that the preferred candidate was losing (-1) or winning (1). Examples of losing messages included mentioning a large disadvantageous funding gap or a deficit in the number of voters registered. Examples of winning messages included mentioning a clear fundraising advantage or stronger grassroots support. Messages that made no mention of a clear advantage or disadvantage went uncoded.
Results

Of the 6,894 political campaign messages, 1,470 (21.3%) make reference to how close the race is. Of these, 1,445 (98.3%) implied that the race was close. The minority of these messages offer any indication of whether or not the candidate is winning or losing. Among the 396 (27%) that do make reference to whether the candidate is winning or losing, a significantly greater fraction of them (N=231, 58%) indicate that the candidate is losing relative to winning (N=165, 42%), Chi Square (1, N=396)=11.0, p=0.001. In other words, when the campaign messages communicate that the race is close, the majority of those messages assert that the candidate is losing.

Table 1. Emails Sent to Supporters by 2012 U.S. Presidential Campaigns

<table>
<thead>
<tr>
<th></th>
<th>Close</th>
<th>Blowout</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sender’s side losing</td>
<td>231</td>
<td>0</td>
<td>231</td>
</tr>
<tr>
<td>Sender’s side winning</td>
<td>165</td>
<td>23</td>
<td>188</td>
</tr>
<tr>
<td>Totals</td>
<td>396</td>
<td>23</td>
<td>429</td>
</tr>
</tbody>
</table>

Discussion

The vast majority of campaign emails to supporters do not make reference to whether or not the race is close. However, when they do reference closeness, they tend to emphasize that the campaign is losing (and not winning). The emails sent by those who develop campaign messages appear to have been developed by people who know that low confidence is especially motivating to supporters. It is important to note that while campaign emails tend to reflect this insight, it is possible that the insight is not explicitly known by those who developed them within
the campaigns. This is because of the prevalence of A/B testing in campaign fundraising. This constant testing of widely varying messages could generate the pattern we observe: messages highlighting that the candidate is barely losing may tend to dominate other messages. Interestingly, this would result in campaigns communications tending to reflect the motivating power of expressing under-confidence, without campaigns knowing it.

**General Discussion**

Political candidates are a famously optimistic lot. Even long-shot candidates who are far behind in the polls regularly claim that they have a real shot at winning. Is that the best strategy for motivating their supporters? Our results suggest that, at least under some circumstances, candidates could benefit from making a somewhat less confident claim: that they are just behind their rivals. Across six studies we consistently demonstrate the motivating power of under-confidence. While uncommitted voters tend to prefer the candidate who is barely winning (rather than barely losing), those who already support a candidate are more motivated when the candidate is barely losing (rather than barely winning). Two fundraising experiments (with 1M+ observations) showed that this effect is substantial. Emails emphasizing that the preferred candidate was barely losing raised 55% more money than emails emphasizing that he was barely winning. While survey respondents were not particularly aware of the motivating power of under-confidence, emails collected during the 2012 Presidential election tended to reflect this insight. When those emails noted that the race was close, they were more likely to say that the preferred candidates were losing.

However, it is worth highlighting Study 1’s interaction between confidence and commitment. The “we’re losing” message was most effective at increasing support among those who already viewed the focal candidate favorably. Among the undecided, there was some
evidence of a bandwagon effect: they were more likely to support the candidate who led in the polls. Research on reporting coverage of political polling results documents evidence of both bandwagon and underdog effects (McAllister & Studlar, 1991). Those findings are compatible with ours.

While Study 5 found that Obama and Romney’s fundraising emails were more likely to say that the candidate was barely losing than that he was barely winning, recall that the recipients were likely supporters. It is plausible that the opposite communication pattern holds when candidates communicate during efforts to persuade voters to support them, such as during televised interviews or speeches. Candidates may present themselves as exceedingly confident because it may influence uncommitted voters. This is exactly the kind of custom tailored messaging that is enabled by contemporary micro-targeting tools (Nickerson & Rogers, 2014). Future research should explore whether this strategic display of over- and under-confidence does arise.

Our results join a growing body of research identifying the circumstances under which confidence is helpful. It most emphatically is not the case that more confidence is always better – despite the assertions of self-help books. Overconfident entrepreneurs take too many risks. Overconfidence impairs investors’ performance. Overconfident leaders engage in too many competitions, fights, strikes, lawsuits, and wars. Overconfident skydivers, rock climbers, and big wave surfers have shorter life expectancies. And overconfident messages assuring certain victory can dampen the support for a political candidate. Clearly, in some circumstances confidence is conducive to higher performance (Duckworth, Peterson, Matthews, & Kelly, 2007). However, when performance depends on effort, the confident belief that success is assured can be self-
negating (Vancouver & Kendall, 2006; Vancouver, Thompson, Tischner, & Putka, 2002). The present research suggests that this is the case in politics.

Our results are consistent with research on defensive pessimism, which shows the benefits of thinking negatively (Norem, 2002). However, most of that research has focused on how individuals motivate themselves to exert effort to avoid failure. Our results differ in that we show how a leader can motivate supporters by displaying moderate pessimism. When leaders conveys under-confidence to their supporters they have a motivating effect that is similar to athletes being barely behind at halftime in a close sporting match: it summons increased effort since victory is just within reach (Berger & Pope, 2011).
References


Rick Scott is LOSING in three straight polls!!! Florida’s the mother of ALL swing states and we’re primed to KNOCK OUT the king of voter suppression and his allies – but only if you GIVE NOW! Donate in the next 24 HOURS to get your gift DOUBLED!

Todd,

Wouldn’t it just destroy you if we lost a presidential election because we had our eyes closed when Florida Gov. Rick Scott and other radical governors were going all-out to keep Democrats from voting?

Beating them this November, NOW, is the only way to stop them in 2016.

Republicans don’t hold back ANYTHING in Florida because they know how important it is to the presidency. Just ask George W. Bush and Karl Rove about 2000.

If we’re going to BEAT Rick Scott and other Tea Party Republicans, you need to give in the next 24 hours to help us raise $22,000 to stay on track to hit our goals – a donor will DOUBLE your gift.

We’ve got to be able to protect every vote, in every key state, to WIN.

That’s it, %FIRST NAME%%.

If you’ve saved payment info with ActBlue Express, your donation to the DGA will go through immediately:

Click to donate $%1XHPC% right away.
Click to donate $%2XHPC% right away.
Click to donate $%4XHPC% right away.

Or click here to donate another amount immediately to defeat Rick Scott and extreme vote-suppressing governors. Double your gift in the next 24 hours!
Florida and other battlegrounds are ours! In the states where voters see how extreme these guys are up close, we’re in the driver’s seat.

Help us to victory by **DONATING NOW. We need you.**

Thanks,

Mark Giangreco
Digital Director

**Contribute**

This email was sent to **melanie@annelewisllc.com**.
To unsubscribe from the DGA email list, **click here**.

Paid for by DGA Action, [www.democraticgovernors.org](http://www.democraticgovernors.org), and not authorized by any candidate or candidate's committee.
We’ve fallen behind Rick Scott in the latest poll!!! Florida’s the mother of ALL swing states and we need more resources to KNOCK OUT the king of voter suppression and his allies – but you have to GIVE NOW! Donate in the next 24 HOURS to get your gift DOUBLED!

Todd,

Wouldn’t it just destroy you if we lost a presidential election because we had our eyes closed when Florida Gov. Rick Scott and other radical governors were going all-out to keep Democrats from voting?

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Help us to victory by DONATING NOW. We need you.

Thanks,
Mark Giangreco
Digital Director

Contribute

This email was sent to melanie@annelewisllc.com.
To unsubscribe from the DGA email list, click here.

Paid for by DGA Action, www.democraticgovernors.org, and not authorized by any candidate or candidate's committee.
Send on 6/30

---------- Forwarded message----------
From: Lis Smith <info@dga.net>
Date: Mon, June 30, 2014
Subject: BREAKING POLL IN FLORIDA
To: todd.rogers.mail@gmail.com

BREAKING: A new SurveyUSA poll has Democrats LOSING to Rick Scott in Florida, 41-42!!! Now is THE moment to DETHRONE the king of voter suppression and his allies in key battlegrounds. DONATE now and a donor will DOUBLE your gift to win CRITICAL swing states.

Todd,

If we fall further behind in Florida and other key battlegrounds, we’ll lose this November and risk the White House in 2016 – that’s a slippery slope we CAN’T afford.

The ONLY way to turn this around is to get a team on the ground to rally our Democratic supporters and protect every single vote. Scott cheated his way into office before – we CAN’T let him and other Republicans do it again.

If we’re going to STOP Rick Scott and other Tea Party governors, each of us needs to give in the next nine hours to help raise $50,000 so we can storm back and win – a donor will DOUBLE your gift.

If you've saved payment info with ActBlue Express, your donation to the DGA will go through immediately:

Click to donate $1XHPC% right away.
Click to donate $2XHPC% right away.
Click to donate $4XHPC% right away.

Or click here to donate another amount immediately to defeat Rick Scott and extreme vote-suppressing governors. Double your gift in the next nine hours!
What happens in Florida does NOT stay in Florida – it changes EVERY battleground state. But
time is running out and we need to make up lost ground! Help us to victory across the country by
DONATING NOW.

Contribute NOW to kick out the Tea Party and bring Democrats to the polls in 2016!

Thanks,
Lis Smith
Communications Team
Democratic Governors Association

Contribute

This email was sent to melanie@annelewisllc.com.
To unsubscribe from the DGA email list, click here.

Paid for by DGA Action, www.democraticgovernors.org, and not authorized by any candidate or
candidate's committee.
Forwarded message

From: Lis Smith <info@dga.net>
Date: Mon, June 30, 2014
Subject: BREAKING POLL IN FLORIDA
To: todd.rogers.mail@gmail.com

BREAKING: A new SurveyUSA poll has Democrats LEADING Rick Scott in Florida, 44-40!!! Now is THE moment to DETHRONE the king of voter suppression and his allies in key battlegrounds. DONATE now and a donor will DOUBLE your gift to win CRITICAL swing states.

Todd,

We have to protect this lead! If we let Scott overtake us, we’ll lose this November and risk the White House in 2016 – that’s a slippery slope we CAN’T afford.

The ONLY way to protect our lead and win is to get a team on the ground to rally our Democratic supporters and protect every single vote. Scott cheated his way into office before – we CAN’T let him do it again.

If we’re going to STOP Rick Scott and other Tea Party governors, each of us needs to give in the next nine hours to help raise $50,000 so we can storm back and win – a donor will DOUBLE your gift.

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Or click here to donate another amount immediately to defeat Rick Scott and extreme vote-suppressing governors. Double your gift in the next nine hours!
What happens in Florida does NOT stay in Florida – it changes EVERY battleground state. But time is running out and we need to make up lost ground! Help us to victory across the country by DONATING NOW.

**Contribute NOW to kick out the Tea Party and bring Democrats to the polls in 2016!**

Thanks,

Lis Smith  
Communications Team  
Democratic Governors Association

[Contribute](#)

This email was sent to melanie@annelewisllc.com.  
To unsubscribe from the DGA email list, click here.

Paid for by DGA Action, [www.democraticgovernors.org](http://www.democraticgovernors.org), and not authorized by any candidate or candidate's committee.
Complete Donation Calculation Procedure

Winning and Losing Studies 3a and 3b

After the intervention, the vendor (Anne Lewis Strategies, LLC) sent data to the researchers in two datasets. Dataset 1 was a complete individualized data set with all participants who had received any of the four emails in Study 3 (Losing in Study 3a, Winning in Study 3a, Losing in Study 3b, or Winning in Study 3b). There were a total of 668,618 participants in Dataset 1. The vast majority of recipients received an email during both Study 3a and Study 3b. A small number only received an email in Study 3a, but not in Study 3b. Though there are many possible routes to receiving only this one email, the most common is that the recipient opted out of the email list sometime after Study 3a. Similarly, a small number of recipients received an email only in Study 3b. The most likely cause is that they had signed up for the DGA after the Study 3a email was sent. Each recipient in Dataset 1 was represented as a row. Dataset 1 included the following columns:

- random unique identifier for each person
- Study 3a condition assignment (Losing or Winning)
- Study 3a past donor status (past donor or prospective donor)
- whether the Study 3a email was opened
- whether the Study 3a link was clicked on
- whether or not a donation was made on the landing webpage associated with the correct Study 3a condition
- The dollar value of the donation made on the landing webpage associated with the correct Study 3a condition
- Whether the recipient opted out the DGA email list after receiving the Study 3a email
- Study 3b condition assignment (Losing or Winning)
- Study 3b past donor status (past donor or prospective donor)
- whether the Study 3b email was opened
- whether the Study 3b link was clicked on
- whether or not a donation was made on the landing webpage associated with the correct Study 3b condition
- The dollar value of the donation made on the landing webpage associated with the correct Study 3b condition
- Whether the recipient opted out the DGA email list after receiving the Study 3b email

Dataset 2 was a list of all recipients who donated money (610 donors in total) through the landing webpages associated with each email in the two experiments. Each recipient in Dataset 2 was represented as a row. Dataset 2 included the following columns:

- random unique identifier for each person (not linkable with Dataset 1)
- whether the donation was made through a landing page associated with a Winning email or a Losing email
- whether the donation was made through a landing page associated with Study 3a or Study 3b
- Past donor status at the time the donation was made (past donor or prospective donor)
- The dollar value of the donation

There are a handful of important elements to note about these two datasets. First, the random unique identifiers in Dataset 1 and Dataset 2 were not linkable. Second, Dataset 2 shows that there were more total donations made than Dataset 1 would suggest. According to the fundraising consultant, this may have resulted from donors using different email addresses.
Donations reported in Dataset 1 reflect only donations made using the email address that was used by the vendor to send out the emails. If a recipient donated money using an email address that was different from the one that the vendor used, the donation would not be reported in Dataset 1, but would be reported in Dataset 2. Importantly, neither dataset included the email addresses used by the vendor to send the emails or used by the recipient to make a donation.

This means that Dataset 1 underestimates the total number of donations a given email generated, and the total dollar value of donations a given email generated. In order to compare the number of donors generated by each email in each study, and to compare the amount of money raised by each email in each study, we developed the following dataset integration strategy:

- We match all donations in Dataset 1 to a donation in Dataset 2 based on study, condition, and dollars donated. This leaves Dataset 2 with unmatched donations. Specifically, Dataset 2 is left with 13 unmatched donations worth $354 from Study 3a and 26 unmatched donations totaling $645 from Study 3b.

- We assume that each donation in Dataset 2 is associated with a recipient in Dataset 1 who opened the relevant email and clicked on the relevant donation link and that Dataset 1 does not report the unmatched donors in Dataset 2 as having made a donation. This is consistent with the fact that in Dataset 1 all donations amounts and their associated emails have a match in Dataset 2.

- We create Dataset 1.1 in which we add the unmatched donations from Dataset 2 to recipients in Dataset 1 who received the same email as those who made the unmatched donations in Dataset 2. These Dataset 1 recipients will have opened the relevant email
and clicked on the relevant donation link, but will not have been recorded in Dataset 1 as having made a donation.

- All analyses reported in the manuscript use Dataset 1.1.
Specific Polls Referenced in Study 3a and Study 3b:

Study 3a Winning Condition referenced:

- SurveyUSA [http://www.surveyusa.com/client/PollReport.aspx?g=e382e9bb-f847-40be-8cea-bc1b17845725]


Study 3a Losing Condition referenced:

- SurveyUSA [http://www.surveyusa.com/client/PollReport.aspx?g=e3ee92de-531b-4a8b-9ac6-eb00efda84b1]

Study 3b Winning Condition referenced:


Study 3b Losing Condition referenced: