Leadership & overconfidence

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abstract

Expressions of confidence can give leaders credibility. In the political realm, they can earn votes and public approval for decisions made in office. Such support is justified when the confidence displayed is truly a sign that a leader (whether a candidate or an incumbent) is competent. However, when politicians are overconfident, the result can be the election of incompetent leaders and the adoption of misguided policies. In this article, we discuss processes that can lead to a confidence "arms race" that encourages politicians to display more confidence than their rivals do. We also illustrate how overconfidence and hyperbole have impaired responses to the COVID-19 pandemic in many nations and offer guidance for distinguishing politicians who display levels of confidence that reflect their true assessment of a situation from those who fake their self-assurance. We then suggest ways that leaders in all spheres can convey uncertainty honestly without losing credibility, and we propose a way to prevent overconfidence from resulting in ineffective or counterproductive legislation.

On January 22, 2020, a journalist at the World Economic Forum in Davos, Switzerland, asked then-president Donald Trump whether he was worried about a possible pandemic. Trump responded, "No, we're not at all. And we have it totally under control."[1] In response to the threat posed by COVID-19, Trump showed indomitable confidence. In the early months of what would eventually become a devastating global crisis, he repeatedly told the American people that the virus would "disappear" and reiterated that his administration had the problem under control. Yet, in private, the president admitted that he had knowingly misled the public—as recorded interviews released by journalist Robert Woodward revealed the following September. In March 2020, he told Woodward, "I wanted to always play it down. I still like playing it down, because I don't want to create a panic."[2]

Trump's staunch confidence was not restricted to the pandemic; rather, it reflected his general approach to leadership. At a May 2016 rally, for instance, then-candidate Trump promised victory and asserted, "We're going to win so much. We're going to win at trade, we're going to win at the border. We're going to win so much, you're going to be so sick and tired of winning."[3]

Trump may be unique in his relentless displays of optimism in the face of facts, but he is far from alone in exploiting optimistic spin to gain public approval. An analysis of the optimism conveyed by candidates for the U.S. presidency over the years found that the more optimistic candidate won nine out of 10 elections. When Harold M. Zullow and Martin E. P. Seligman coded the speeches of the major party candidates, they found that pessimistic rumination preceded a candidate's subsequent defeat at the polls.[4] They concluded, "These results suggest that the American voter, across historical period [*sic*], places a high premium on the appearance of hope."[4]

Voting for a confident candidate is rational when the voter believes the candidate's confidence indicates the candidate will be an effective leader. And displays of confidence can, indeed, be a sign of future effectiveness when they come from the knowledge that one is competent and has been successful in the past. As Paul A. Mabe and Stephen G. West reported in 1982, confidence and subsequent performance usually do correlate, probably because competence gives rise to both success and confidence, although the correlation is not strong.[5]

Yet when politicians' displays of confidence are based not in competence but on an inflated sense of competence or are simply faked, they can have terrible consequences. They increase the likelihood that voters will elect candidates who will underperform and cause harm. Overconfidence and pretenses of confidence can impair planning for an uncertain future in a complicated world, one in which a leader cannot just wish away pandemics and other crises.

Voters' tendency to favor confident-seeming leaders puts politicians who want to be honest about the pros and cons of their policy proposals in a bind, especially when they find themselves up against unscrupulous rivals. In this article, we explore the consequences of overconfidence and hyperbole, as well as the psychological dynamics that can make people behave with more confidence than is justified by the facts; we also present findings that belie the popular notion that feeling confident (regardless of whether the confidence is justified) can increase the likelihood of performing well on a task. We then delve into the challenges of distinguishing leaders who are justifiably confident from those who are overconfident or faking, and we suggest ways that the public and politicians can address those challenges. (In this article, we use the word *leader* to apply both to people in leadership positions and to candidates for those positions.) Finally, we plot a path for leaders who strive to be both honest and confident. Our advice is relevant to leaders in and out of politics.

Consequences of Overconfidence

Overconfidence may be the most powerful and prevalent of the many biases to which human judgment is vulnerable.[6] The term *overconfidence* can refer to several related beliefs, such as an unjustified belief in one's superiority to

others, overestimation of how well one will perform on a task, or unwarranted certainty in the accuracy of one's judgments. This last manifestation, called *overprecision*,[7] can be especially problematic in a leader. Overprecise leaders tend to trust their intuitions (which can be heavily influenced by biases) too strongly and fail to recognize when this trust impairs their decision-making. Overconfidence in one's own judgment also decreases the perceived need to incorporate the views of advisers and experts when doing so is warranted—a key characteristic of Trump's mismanagement of the pandemic. Being appropriately skeptical of intuition, in contrast, helps people rein in their overconfident judgments.

In everyday life, overconfidence in one's judgments and abilities can prove costly. Overconfidence leads people to enter too many contests they will lose;[8] escalate their commitment to doomed endeavors;[9,10] bet too much money on risky investments;[11] and fail to protect themselves from significant risks, such as COVID-19.[12] A leader's overconfidence can also harm other people. It has played a key role in some of the greatest blunders in modern history, including the sinking of the Titanic, the Vietnam War, the Chernobyl nuclear accident, and the 2008 financial crisis, not to mention governmental mismanagement of the COVID-19 pandemic.[13–15] Indeed, as we show next, populist leaders' disastrous responses to the pandemic offer a stark illustration of how leaders who overconfidently believe they can easily manage a serious threat or who pretend to have such confidence can fail the people they serve.

Overconfidence, Hyperbole, & the Pandemic

Early in his presidency, Donald Trump's apparent assurance that his administration was prepared to handle a disease outbreak actually led him to impair the nation's later response to COVID-19:[16] In 2018, Trump dismantled the national agency charged with preparing the United States for the threat of a global pandemic.[17]

After the pandemic began, Trump and leaders like Jair Bolsonaro of Brazil, Andrés Manuel López Obrador of Mexico, Alexander Lukashenko of Belarus, and Narendra Modi of India then mistakenly or falsely assured their nations that everything was under control. They denied the severity of the problem (or its existence altogether), denigrated scientific expertise, and in some cases even advocated quack treatments.[18] For instance, during the 2020 U.S. presidential election campaign, Trump insisted that the nation was "rounding the bend" even as cases were spiking and the country was setting grim records for COVID-19 infections, hospitalizations, and deaths.[1]

Trump's posturing had devastating consequences. In the United States, many people who believed the pandemic was under control (or a hoax) resented and resisted protective measures, such as lockdowns, social distancing, masks, and vaccines. In turn, those who flouted protective measures were among the most likely to contract the virus and pass it on to others.

In contrast, the national leaders who managed the virus most effectively did not claim to have all the answers. They acknowledged the serious challenges the virus posed and had enough humility to follow the advice of scientific and public health experts, who provided guidance based on the best information they had at the time. The steps taken by the leaders of Taiwan and New Zealand offer instructive examples: Both issued dire warnings early in the pandemic and instituted aggressive lockdowns that limited the virus's spread.

In Taiwan, President Tsai Ing-wen faced the reality of COVID-19's deadliness and enforced aggressive containment measures recommended by public health experts. In January 2020, she ensured that plenty of masks were available for the island's inhabitants. Her government imposed travel restrictions and quarantines that limited the movement of anyone suspected of infection, with meaningful fines for those who failed to comply.[19] For example, on January 25, a man was fined $300,000 Taiwanese dollars (about $10,000 USD) for failing to report his infection to Taiwanese authorities. As infection rates increased in early February, the government

closed schools. These measures succeeded in containing the virus. Schools soon reopened, and life in Taiwan largely returned to normal by late 2020.[20]

When the coronavirus struck New Zealand in March 2020, Prime Minister Jacinda Ardern also took swift, science-based action. "We have a window of opportunity to stay home, break the chain of transmission, and save lives" Ardern told the nation on March 25. "It's that simple."[21] The next day, New Zealand entered a strict, nationally coordinated lockdown.[22] Travel and public gatherings were severely constrained. By June, the country was registering no new cases, and normal life resumed.

Every leader must balance the imperative to tell the truth against the need to express confidence. People take comfort in leaders' assurances that plans will be successful, the future is bright, and sacrifices will prove worthwhile in the end. But the leader who purposely or overconfidently gives false hope and refuses to take threats seriously may give comfort temporarily but do untold harm in the long run.

The Lure of Overconfidence

The many ill effects of overconfidence raise the question of why it occurs. One explanation may be that confidence feels good, which suggests that self-delusion may be its own reward[23]—at least temporarily. Savoring the sanctimonious satisfaction of believing they are right may lead people toward greater short-term confidence simply because they enjoy the feeling.[24] Also, the costs of being overconfident, such as embarrassment or failure, do not come until later, and it is easy to discount these future consequences.

People often point to another motivation for feeling confident: the belief that confidence contributes to success (a notion popularized by the 2006 book *The Secret*).[25] For instance, in a 2008 article titled "Prescribed Optimism: Is It Right to Be Wrong About the Future?" David A. Armor, Cade Massey, and Aaron M. Sackett report that the overwhelming majority of their respondents endorsed feeling optimism, even

excessive optimism, because they thought that simply holding optimistic beliefs would make them come true.[26]

The logic for believing that confidence breeds success is flawed, however. On its surface, the finding that more confident politicians win elections more often than less confident politicians do[4] might seem to support the notion that confidence leads to success, but other compelling factors often explain this association instead. Notably, optimism often correlates with success when optimistic individuals actually have better prospects, as when they are incumbents running for reelection in a strong economy or are widely adored by voters. These factors could account for both their confidence and their electoral success. Similarly, evidence that more confident athletes are more likely to win[27] could easily be explained by athletic ability, which ought to enhance both confidence and success. In these cases, optimism is warranted because it is well calibrated with reality and not the product an unfounded belief that feeling confident will magically lead to success.

The right way to test whether confidence influences performance is to conduct experiments that manipulate confidence directly and measure that manipulation's effect on performance. In one such experiment, Elizabeth R. Tenney, Jennifer M. Logg, and Don A. Moore (one of the authors of this article) manipulated confidence while leaving other factors, such as skill, constant.[28] Participants first took a math test (the *pretest*), after which those assigned to the high-confidence condition were told they did very well, and those assigned to the low-confidence condition were told they did poorly. Then both groups took a test equivalent to the pretest. The result? The groups performed similarly. Follow-up experiments using other tasks produced the same result: Confidence did not affect performance on trivia quizzes, tests of athletic performance, physical endurance, or attention.

The team also tested observers' predictions of how successful others who were more and less confident would be on a math quiz. These observers, who did not take the quiz themselves, were told that the researchers had randomly

assigned other participants to be either high or low in confidence about their imminent performance on a math quiz, independent of their actual math ability. Then the observers bet money on which group would perform best. Despite knowing of the participants' random assignment to the conditions, the observers bet on those in the high-confidence condition, predicting that high confidence would translate into high performance. Their faith in the benefits of confidence was misplaced, and it cost them financially. In short, they were duped, just like voters who vote for the most confident-seeming candidate because they believe that confidence reliably predicts competent leadership.

Some readers may wonder whether our earlier mention that displays of confidence often signal true competence is incompatible with the findings showing that acting confident does not by itself improve ability. The answer is no, the two findings are not inconsistent. Confidence can potentially be a useful signal, but it is also vulnerable to misrepresentation. When true ability is what bolsters confidence, displays of that confidence will be a reliable indication of that ability, as innumerable studies have found.[29] However, artificially inflated confidence is unlikely to have much effect on performance,[28] even though it can sometimes fool others regarding one's competence in the short term.

Even if confidence does not contribute to performance on any of the tasks tested in these experiments, it probably can be beneficial in some circumstances, as when it motivates a person to be persistent at a task or when it impresses people (such as voters) whose approval is being sought. Considering the latter case, Dominic D. P. Johnson and James H. Fowler have developed a theoretical model predicting that overconfidence in contests over access to scarce resources (like food or mates) could confer an evolutionary advantage to the overconfident individuals.[30]

The logic goes like this: Displays of strength by rivals help to signal who is likely to win a future contest and to calibrate the contenders' confidence in their abilities. When a contest could lead to violent conflict, the likely loser should prefer to concede rather than suffer injury. Yet this dynamic creates the possibility that a display of supreme confidence by the weaker contestant will scare off a stronger rival, which would make such fake displays appealing to the weaker person.

Something similar can happen in politics. Regardless of their inner reality, politicians know, as we pointed out earlier, that expressing self-confidence builds others' faith in a person's abilities and helps attract supporters, such as voters, donors, employees, customers, and investors. When confident-seeming people gain credibility with others, they increase their likelihood of being elevated to positions of status and influence in social groups.[31] As we have also noted, voters prefer confident candidates, typically believing their confidence is a signal of ability or potential performance.

This dynamic can have unfortunate consequences for the public if political candidates, knowing that self-confidence attracts voters, begin a kind of "confidence arms race," in which each person strives to express greater confidence than the other.[32,33] The greater the escalation, the less informative candidates' signals of confidence become. If all candidates end up expressing maximal confidence, these expressions become worthless as a sign of competence and future performance and thus as a guide to accurately distinguishing among candidates. We repeat: Beware of leaders who talk themselves into false displays of confidence that are untethered to reality.

The possibility of a confidence arms race means that voters (as well as the supporters and funders of candidates) must figure out whether candidates are over- or falsely confident or whether their confidence is based on solid evidence. We next offer some advice for how to identify which people fall into each camp.

Confident for Good Reason or Not?

It is tempting to try to distinguish honest from deceptive politicians on the basis of whether their expressions of confidence are truthful

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versus disingenuous.[34] However, differentiating justified confidence from overconfidence and true feelings of confidence from artificial displays and can be challenging, for the following reasons.

For one, it is often a mistake to assume that people hold some true inner beliefs that can be discerned from observed cues or that could be articulated if only the individuals were honest. With respect to cues, for instance, one set of experiments found that the assertiveness of a speaker's tone correlated only weakly with how confident a person claimed to be about a judgment (on a scale running from *not confident* to *extremely confident*) and with the person's judgment of the likelihood that they were correct (on a scale ranging from 0% to 100%).[35] Research also finds that individuals give widely varying answers to questions about their confidence, depending on how the questions are phrased[36] and what metric is used. When asked how certain they are that their answer to even a straightforward question is correct (such as what some famous person weighs), people may seem pathologically overconfident, but they may be less sure when asked to estimate the likelihood of each of many possible answers being correct.[37,38] If large inconsistencies appear in responses to even simple questions with objectively correct answers, differences are likely to be even more pronounced when people proffer opinions on questions that do not have simple, clear answers.

A second major challenge is self-deception. Research on hubris suggests that some leaders may actually believe the most grandiose assessments of their abilities and potential.[39] William von Hippel and Robert L. Trivers argue that people who feel and display confidence, regardless of whether the feeling is justified, signal a strong belief in their judgments and do so more convincingly than do people who know they are faking it.[40] The latter might waver or reveal some self-doubt, whereas the former will not.

Finally, it can be quite difficult for the public to read politicians' confidence signals accurately because politicians are often particularly hard to read. Their expressions of confidence frequently come in the form of cheap talk and uninformative signals. Speaking first, speaking more, and interrupting others are classic signals of confidence.[41] Similarly, an expansive posture, a loud voice, and emphatic body language typically communicate that someone is self-assured.[42] However, all of these signals are easy to fake, and none come with a discernible and provable claim regarding performance. Contenders for leadership frequently display these trappings of confidence but avoid making specific commitments to which they could be held accountable.[43] It was less risky for candidate Joe Biden to proclaim that he would "build back better" from the pandemic than to promise a specific performance metric that he might fail to reach, such as a specific rate of economic growth or reduction in unemployment.

Even if members of the public could readily distinguish true from fake confidence in a politician, they would face the added challenge of discerning whether the motives for displaying great confidence were self-serving or benevolent. Jessica A. Peck and Mary Hogue acknowledge that leaders can differ in their motives for using impression-management techniques.[34] Leaders may justify overblown expressions of confidence on the grounds that their optimism serves the public good, arguing that optimism inspires followers. Disney CEO Robert Iger, for example, has written, "One of the most important qualities of a good leader is optimism. People are not motivated or energized by pessimists."[44] Similarly, an article in the *Harvard Business Review* has argued that effective leadership in the pandemic requires optimism, advising, "Force yourself to think positively."[45] Donald Trump claimed to have a prosocial motive as well in *The Art of the Deal*, saying, "The final key to the way I promote is bravado. I play to people's fantasies. People

may not always think big themselves, but they can still get very excited by those who do. That's why a little hyperbole never hurts."[46] Yet the appearance of confidence in leaders seeking to maintain faith in their leadership can also stem, of course, from selfish motives.[47]

Although politicians may justify their displays of bravado as being inspiring embodiments of leadership charisma,[48] their overconfidence is necessarily misleading. Incorrectly pretending a nation is poised for victory against a military foe, a pandemic, or an economic rival may well interfere with actual readiness and resilience, even as it bolsters faith in someone's leadership.

Given the difficulties involved in assessing how accurately politicians' displays of confidence reflect their beliefs, the public would be better off making a comparison with reality. That is, people should ask whether leaders are more confident than the facts can justify. The most effective leaders can accurately forecast and navigate both risks and opportunities, asking themselves such questions as, How many lives will we lose if we go to war? and What would it take for our nation to reach herd immunity? In each of these circumstances, the truth helps guide wise decisions and planning for the future.

Because candidates' expression of confidence can be misleading—just as wearing a white lab coat and a stethoscope does not necessarily mean that the person wearing them is a good doctor or even a doctor at all—voters who want to distinguish honestly confident politicians from those who are overconfident or faking it should move beyond their intuitive reactions and reflect carefully on candidates' claims, track records of prior performance, and credibility. What are the chances that the candidates can deliver on their promises? Have they been able to do so in the past? Have others like them in similar situations been able to follow through on their commitments?

Skepticism of leaders' displays of confidence leads us to propose a novel way to potentially reduce the likelihood that politicians will base policy decisions on overconfident assumptions. We draw inspiration from parallels in the

"people should ask whether leaders are more confident than the facts can justify"

interplay between leaders' claims and followers' skepticism and in a dynamic that occurs during negotiations.

In negotiations, it is common for one side to seek near-term concessions in return for promises of future benefits. For instance, entrepreneurs seek funding in exchange for a portion of future profits. Professional athletes request generous compensation packages in exchange for stellar performance. Inventors request payment for their innovations on the promise of future sales. In situations like these, a *contingent contract* can be useful.[49] Such contracts include a wager specifying that a given outcome, such as payment of a particular sum of money, depends on meeting a certain benchmark. Team managers can write an athlete's contract so that the full payment of a big salary depends on performance that lives up to the individual's boasts. Or a company may offer a product's inventor a percentage of future sales to license the inventor's patent. If people believe in the boasts they are making, they will gladly take such bets.

It would, in principle, be possible to build contingent contracts into legislation to minimize the negative consequences of overconfidence in the assumptions behind a policy established by a bill. Say that supporters of a bill confidently claim that funding preventative health care will pay for itself by reducing subsequent emergency room visits. Skeptics might be won over and wasteful spending be avoided if the bill included a test for effectiveness and a sunset provision that went into effect if the promised savings did not materialize. Indeed, it was precisely this sort of contingent contract that brought about the Behavioral Insights Team (BIT) in the United Kingdom,[50] which applies behavioral science research to enhance the effectiveness of policies and public services. David Halpern, a former Cambridge University psychology professor and

the BIT's first leader, overcame skepticism about its value with a promise that the team would disband after two years if it delivered less than a tenfold return on its costs. BIT's early endeavors were so successful that it was easy for the group to demonstrate its value.

See Table 1 for a summary of ways that the public, politicians themselves, and leaders in other fields can respond to the pressure leaders feel to express more confidence than reality would justify.

Advice for Honest Leaders

How can leaders who have constituents' interests at heart best walk the line between expressing the confidence that the public seeks and being honest about foreseeable challenges? How can they do both without losing credibility as a competent leader? The task is not easy, especially for political candidates who find themselves in a confidence arms race against an unscrupulous rival. Fortunately, there is a path out of this predicament: Report uncertainties with confidence.[51] No, that is not a contradiction. Leaders should be truthful about the uncertainties inherent in a situation but express confidence that they have accurately assessed the situation and are acting on the best information available. This approach conveys confidence that is well calibrated to the leader's understanding of reality.

A young Jeff Bezos displayed this kind of confidence when he sought funding from prospective investors in Amazon. At the time, it was not obvious that the company he founded would someday make him the richest man in the world. In fact, Bezos anticipated the many ways in which his little startup could fail—and said so. While pointing out the large potential benefits, he also warned prospective investors that there was a 70% chance they would lose all the money they gave him.[52] It was still worth investing, Bezos argued, because the potential return on that investment was so big. He turned out to be right.

Research by Celia Gaertig and Joseph P. Simmons offers helpful guidance for honest leaders who aspire to well-calibrated confidence.[53] Gaertig and Simmons tested the credibility of different types of advice while varying the extent of two types of confidence that have been distinguished by Moore and Paul J. Healy: *estimation* and *precision*.[7] Estimation is an assessment of performance relative to some

Table 1. Potential responses to overconfidence in leaders

Factors that encourage overconfidence	Responses for members of the public	Responses for leaders
Confidence feels inspiring.	Consider ways that claims made confidently might be wrong. Anticipate potential costs of overconfidence.	Seek advisors courageous enough to offer honest criticism of your judgments.
Rivalry spurs leaders to present themselves as being more confident than their opponents.	Favor leaders who honestly describe the uncertainties relating to their policy proposals, forecasts, and campaign promises.	Express uncertainty with well-calibrated confidence. That is, be truthful about uncertainties but express confidence in having assessed a situation correctly.
Rivalry spurs leaders to be overly optimistic that events will turn out as desired.	Seek records of prior accuracy. Invite leaders to bet on their claims, that is, to commit to specific, testable, falsifiable predictions.	Document your own and others' past accuracy. Accept costly bets on what you have good reason to believe is true.
The process of selecting leaders favors the overconfident.	Support the building of *contingent contracts* into plans or policies. Such contracts stipulate plans to end or alter policies that do not meet performance benchmarks.	Base judgments and decisions on the best logic and best evidence, even when it comes from rivals or critics. Use contingent contracts.

absolute standard; it is often framed as a probability, as in, "There is an 85% chance that the Yankees will go to the World Series this year." Precision refers to the certainty one expresses in the accuracy of one's claims, as in, "I am 100% confident that that Yankees will go to the World Series this year." The researchers found that advisers lost credibility when they claimed certainty about something inherently uncertain, such as the outcome of an athletic contest. The most credible advice, by contrast, claimed confidence in a probabilistic estimate, as in, "I'm confident there is an 85% chance we will have a vaccine by the end of the year." The happy implication of these findings is that leaders can earn credibility by honestly reporting well-calibrated confidence.

This, then, is evidence-based leadership:[54] management practice based on truth, facts, and research.[55] It requires thinking probabilistically and admitting the limitations of one's knowledge.

Anthony Fauci earned the trust of the nation as America's top infectious disease specialist by providing well-calibrated confidence in press interviews and public statements. He tried to stick to the facts, the science, and the evidence. Where the scientific evidence afforded clear advice, he gave it. "Wear a mask," he implored Americans in May 2020.[56] At the same time, he was honest about the protection that masks offered and put the value in probabilistic terms: "I believe it is effective. It's not 100% effective."[57] And he was willing to admit what he did not know. When asked about the problem of students missing school due to pandemic closures, he replied, "I don't have an easy answer to that. I just don't."[58]

Leaders may fear that admitting to limitations will undercut their credibility, but done right, it will not harm credibility and will enhance the perception that they are being honest and authentic. Far from undermining leaders' viability, honesty can contribute to their effectiveness. Leaders who are worried about confessing their uncertainty should also consider how much overconfident claims can undermine their credibility in the long run.

In contrast to overconfident leaders, honest leaders will seek ways to present realistic estimates of future risks and opportunities, thereby allowing themselves, their followers, and their constituencies to prepare effectively for an uncertain future by making wise choices and placing smart bets on policies that can realistically be expected to succeed. Making wise choices that maximize expected value represents the very essence of effective political leadership.

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