

Virtues, Vices, and Political Influence in the U.S. Senate

Leanne ten Brinke¹, Christopher C. Liu², Dacher Keltner³, Sameer B. Srivastava¹

¹Haas School of Business, University of California-Berkeley

²Rotman School of Management, University of Toronto

³Department of Psychology, University of California-Berkeley

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*Correspondence to: Leanne ten Brinke, 635 Bakar Faculty Building, Haas School of Business,
2220 Piedmont Avenue, Berkeley, CA 94720; email: leannetenbrinke@berkeley.edu

Abstract

What qualities make a political leader more or less influential? Philosophers, political scientists, and psychologists have puzzled over this question, and have posited two opposing routes to political power—one driven by human virtues such as courage and wisdom, and the other by vices such as Machiavellianism and psychopathy. From the nonverbal coding of political speeches, we assessed the virtues and vices of 151 U.S. senators. We find that virtuous senators became more influential when in leadership roles, whereas senators displaying behaviors consistent with vices—particularly, psychopathy—became less influential as leaders. Results inform a long-standing debate about the role of morality and ethics in leadership, and have important implications for electing effective government officials. Citizens would be wise to consider a candidate’s virtue in casting their vote, to increase the likelihood that elected officials will have genuine concern for their constituents, while simultaneously promoting cooperation and progress in government.

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What is the nature of political influence? This is one of the oldest questions to be considered by social theorists, and can be reduced to two competing hypotheses. A first we call the *virtue hypothesis*, which traces back to Aristotle, who reasoned that of all the various claims to power, including, nobility, wealth, and strength of numbers, the claim of virtue is the most just and desirable (Aristotle, trans. 1962). The virtuous politician, he believed, would bear in mind the interests of the entire state, rather than a privileged few. Political influence was to be found in virtuous practices such as temperance, courage, kindness, and humility, allowing the virtuous politician to lead a harmonious and productive society.

Although he was prescribing advice for a different time period and distinct political system, Machiavelli offered a much different approach in his book *The Prince*—a framework developed in ensuing scholarship. In what we call the *vice hypothesis*, Machiavelli suggested that political leadership requires force, fraud, manipulation, and strategic violence (Machiavelli, trans. 1961). He advised rulers to “crush” those who stood in their way, declaring that it is better to be feared than loved. And while he conceded that it might be useful to appear virtuous, he believed that to actually be kind would be unwise.

Psychological science has recently made advances in conceptualizing and measuring virtues and vices. The Virtues in Action (VIA; Park, Peterson, & Seligman, 2004) scale measures the extent to which individuals are wise, courageous, just, humane, transcendent, and temperate. Another scientific literature has yielded measures of the “Dark Triad,” which capture Machiavellianism, narcissism and psychopathy (Paulhus & Williams, 2002)—constructs that have traditionally been studied in criminal populations, but which are increasingly becoming a focus in organizational settings (Babiak, Neumann, & Hare, 2010). Virtues predict increased

interpersonal trust and prosocial behaviors (Bartlett & DeSteno, 2006; Dunn & Schweitzer, 2005; McCullough, Emmons, & Tsang, 2002). For example, having a grateful disposition or experiencing momentary gratitude increases efforts to assist others, even when it comes at a cost to the self (Bartlett & DeSteno, 2006; McCullough, Emmons, & Tsang, 2002). Further, experiencing transcendent emotions (awe) predicts generosity and ethical decision-making by making the self feel small and increasing the salience of collective concerns and the greater good (Piff et al., 2015). In contrast, vices predict competitive and antisocial actions, including lying, cheating, and aggression—both in prison samples and in the general population (Hare, 2006). In economic games, Machiavellian egocentricity—the tendency to pursue one’s own interests before others’—is negatively correlated with initiating or reciprocating cooperation with a partner (Curry, Chesters, & Viding, 2011). And, in negotiations, psychopathic personalities consistently seek to maximize personal gain, while being seemingly unable to compromise to achieve mutually beneficial outcomes (ten Brinke, Black, Porter, & Carney, 2015).

These self-report measures of virtues and vices represent abstract summaries of the individual’s tendency to act in specific ways, and the intentions underlying those actions. Within face-to-face interactions, where so much political influence transpires, virtues and vices will be manifest in specific patterns of nonverbal behavior, which will in part dictate the social outcomes of the interaction (Caspi & Bem, 1990; Keltner & Kring, 1998; Scarr & McCartney, 1983). This claim is founded upon two distinct theoretical traditions. A first is known as the Brunswikian lens model of individual differences (Brunswik, 1952), which holds that meaningful individual differences in personality traits (or virtues and vices) can be reliably judged by naïve observers because of the behavioral (verbal and nonverbal) cues associated with the underlying trait. For example, people can quickly detect how extraverted a person is through that individual’s pattern

of smiling, speed of speaking, and dynamism of gesture (Asendorpf, 1987; Funder & Sneed, 1993).

And second, the social functional approach suggests that behaviors themselves—for example, facial muscle movements, tones of voice, patterns of gaze, and touch—are strategic manifestations of intentions to have systematic effects upon others in the social environment (Keltner & Kring, 1998; Fridlund, 1992). Domineering individuals, for example, tend to show a pattern of anger in the face, voice, and posture, which furthers their agenda to coerce and control others (Van Kleef, De Dreu, Pietroni, & Manstead, 2006). Together, these two theoretical traditions suggest that virtues and vices will manifest in systematic behaviors, and that those actions may reflect the social strategies through which individuals seek to gain influence (see Table 1 for a brief summary of coded behaviors; complete coding scheme in Table S1).

Particularly in organizations where leaders are required to motivate others and coordinate the collaborative pursuit of collective goals (Anderson & Brown, 2010; Van Vugt, Hogan, & Kaiser, 2008), these divergent social strategies—virtuous and vicious—can have major consequences. Recent research suggests that the upper-ranks of business include a disproportionate number of individuals who are self-serving, smooth-talking, and manipulative ladder-climbers; however, findings also warn of the social harm they cause (Mathieu, Neumann, Hare, & Babiak, 2014). Employees who work for supervisors with psychopathic personality traits report decreased job satisfaction and psychological well-being (Mathieu, Neumann, Hare, & Babiak, 2014). In contrast, virtuous individuals with a strong sense of responsibility to others are reluctant to take on leadership roles but make honest, ethical, and capable leaders and are well liked by others (Cohen, Panter, & Turan, 2012; Schaumberg & Flynn, 2012).

Guided by Aristotle's and Machiavelli's competing prescriptions and the scientific study of the functions of verbal and nonverbal displays, we analyze behaviors reliably associated with vices and virtues to assess the social strategies of a large sample of US senators (Fowler, 2006). We tested these two competing models of influence—the virtue-leads-to-influence hypothesis, best exemplified by Aristotle, and the vice hypothesis, most clearly associated with Machiavelli. In particular, we were interested in how these divergent social strategies yielded political influence on peers upon gaining power (Chen, Lee-Chair, & Bargh, 2001). Specifically, we examined how vices and virtues affected a senator's ability to enlist colleagues as collaborative co-sponsors on bills he or she originated after being elevated to a leadership role: Senate Committee Chair (Chown & Liu, 2015).

Materials & Methods

Cases

We identified 502 videos, which were publicly available in the C-SPAN public library, of *all* 151 US senators who held office in the 101st to 105th Congresses (January, 1989 to December, 1998, inclusive). Senators during these congresses were predominantly male (10 female), and were roughly equally Democratic ($n = 73$) and Republican ($n = 78$).

The C-SPAN library includes gavel-to-gavel floor proceedings of the US Senate. As such, *all* speeches that take place on the Senate floor are included in the library. We considered, for inclusion, all proceedings on the Chamber floor, which consisted of speeches in which the focal senator gave opinions and presented bills, resolutions, and motions for inclusion in the Congressional Record. Public affair events and congressional hearings were excluded. One video of each senator per congress was randomly selected for coding. The mean number of videos coded per senator was 3.35.

Coding

Past research has shown that video clips as brief as 30 seconds can provide reliable evidence of character traits, and that even untrained observers can accurately identify traits based on available nonverbal information (Ambady & Rosenthal, 1992). Thus, we utilized a thin-slicing approach in which the first minute of each video was coded for evidence of virtues (wisdom, courage, justice, humanity, transcendence, temperance) and vices (Machiavellianism, narcissism and psychopathy) on 1 (not at all) to 7 (highly) scales. The first minute of each video was chosen primarily because it allowed for greater standardization of video content. Speeches generally began with a formal request that the speech be entered into the Congressional Record, followed by a description of the bill or issue at hand. This shared script decreased the variation in content across senators while still providing latitude for interpersonal differences in verbal and nonverbal behavior to emerge. Furthermore, speeches generally went uninterrupted in the first minute, allowing us to code behavior that was unaffected by interjecting third parties. Additionally, because these speeches were generally brief, we did not have to exclude any Senators based on the brevity of their speeches, allowing us to code a complete sample of Senators across five different Congresses.

Verbal and nonverbal signals for the six virtues and three vices were derived from a systematic review of the scientific literature describing behaviors empirically and conceptually related to each virtue or vice—a methodology informed by the Brunswikian approach to how social tendencies are manifest in behavior (see Table 1 for a brief summary of coded behaviors; complete coding scheme in Table S1). Specifically, core constructs of each virtue or vice were identified by consulting the psychometric properties of self-report measures commonly used to measure each of the six virtues and three vices (Park, Peterson, Seligman, 2004; Christie & Geis,

1970; Paulhus, Neumann, & Hare, 2015; Raskin & Hall, 1979), For example, callousness has been identified as a core construct of psychopathy, and gratitude is a core construct of transcendence. Established verbal and nonverbal correlates of these constructs were then identified via a systematic review of the empirical literature; callousness is signaled by a lack of emotional facial expression and gratitude is marked by giving thanks and bowing one's head. Guided by a vast body of literature on trait associations with nonverbal behavior, we translated each core component of the virtue or vice to its verbal and nonverbal behavioral manifestations and extensively trained a group of coders to detect them. Coders then used this scheme to rate the degree to which each of the six virtues and three vices was evident in the first minute of the speech on 1 (not at all) to 7 (highly) Likert scales. Coders were blind to hypotheses and cosponsorship outcomes. Ratings were reliable with a second, independent coder, based on a random sample of 61 videos ($\alpha = .70$ to $.82$; see Table S2 for all reliabilities).

In order to test our primary hypotheses, composite (mean) measures of virtues (wisdom, courage, justice, humanity, transcendence, temperance) and vices (Machiavellianism, narcissism and psychopathy) were created. Reliable measures of psychological traits demonstrate temporal stability; to ascertain whether this proved to be the case in the present study, we tested the consistency of the composite ratings of virtues and vices across a decade of senator-congress observations. ICCs were $.52$ and $.60$, $ps < .001$, for virtues and vices, respectively. This level of consistency is considered "good" by standards set out by Fleiss (1986; good: $.40 - .75$) and provides support for the validity of our coding scheme, indicating that our coding method taps traits that remain constant over time. Consistency of individual trait ratings across congresses ranged from $.32$ (wisdom) to $.75$ (psychopathy), all $ps < .03$. Interestingly, the consistency of wisdom may be low because it is the only trait to change (increase) linearly over time ($B = .13$, p

= .003)—a finding consistent with the concept of wisdom and lending further evidence to the validity of our coding approach (Baltes & Staudinger, 1993).

Leadership Role

The purest pitting of the virtue and vice hypotheses against one another needs to hold constant the individual's position of authority, or role-based power. Such an approach allows for a less ambiguous assessment of the influence the different strategies produces. For example, it is possible that individuals who adopt a virtue or vice strategy will be more (or less) successful in rising within the organization, and then enjoy different levels of influence that depend upon their position or role within the organization. In light of this concern, we turned to the bureaucratic mechanism that underlies power gains in the US Senate. Specifically, Senate rules dictate that the individual with the *longest* tenure on each committee will be the Senate Chair. This rule, reminiscent of a vacancy chain, mandates that some individuals "in waiting" rise to power quickly while others advance more slowly, depending upon the departures of an individual's more senior colleagues (Chase, 1991). As a consequence, it is plausible to consider an individual's elevation to committee chair to be exogenous (random), thus allowing us to account for a Senator's position of authority, for a purer test of the virtue and vice hypotheses.

Political Influence

For each senator, we then derived a measure of political influence based on his or her ability to successfully enlist colleagues as collaborative cosponsors on bills that he or she originated in a given Congress (Fowler, 2006; Liu & Srivastava, 2015). To ensure that collaborations were meaningful, rather than symbolic, we restricted our analysis to bills with fewer than five co-sponsors (often, more symbolic collaborations on bills enlist dozens of

sponsors but are not meaningful indicators of interpersonal influence; Theriault, 2013)¹.

Consistent with the notion that collaborative cosponsorships are reflective of political influence, we note that our outcome measure is highly correlated with the number of bills ($r = .41, p < .0001$) and amendments ($r = .66, p < .0001$) that a senator succeeds in having passed into law.²

Results

Demographic Differences in Vices and Virtues

Across the 468 senator-congress observations we used for multivariate regression analysis, female senators rated higher on a standardized mean composite measure of the six virtues than male senators (1.2 versus -0.07; $p < 0.001$).³ Recognizing that the sample included a very small number of women (10), we found no significant gender difference on a mean composite of the vices. Similarly, there were no significant differences in virtues or vices between the two main political parties: Republicans and Democrats.

Statistical Approach

As we observed each individual and their leadership role over multiple congresses, we employ a multiple regression strategy with individual fixed effects.⁴ The individual fixed effects

¹ We conducted supplemental analyses to assess the robustness of the main results (as presented in Table S4, Model 13) to alternative cutoffs for the number of cosponsors per bill. The interaction between *Committee Chair* \times *Virtues (Composite Measure)* term remains positive and significant when we choose cutoffs of 3, 5, 9, and 11, and marginally significant ($p = .056$) when we choose a cutoff of 7. At cutoffs of 12 and beyond, the noise from symbolic cosponsorships appears to swamp the signal of influence, and the interaction term is no longer significant.

² Comparable results (not reported) were obtained when we separately estimated models using cosponsorships from senators of the same party versus cosponsorships from senators of the other party.

³ Although 502 senator-congress observations were coded, only 468 were included in subsequent analyses. Senators who served in only one of the coded congresses could not be analyzed as multiple observations for each individual were necessary to conduct the multivariate regression analyses reported.

⁴ Fixed effect and linear mixed effect models represent two of the most common approaches to analyzing data on individuals who are observed over multiple time periods. The main advantage of the former is that they account for time-invariant unobserved heterogeneity and therefore tend to produce less biased estimates; however, they may also be subject to high sample dependence. On the other hand, linear mixed effect models reduce the variance of those estimates. In other words, these models strike different tradeoffs between bias and sample-to-sample variability. On balance, we believe that models with individual fixed effects are better suited to our empirical context, data structure, and theoretical aims. This approach helps to mitigate the threat of bias from various unobserved variables that could also affect a senator's ability to exert influence. In addition, these "within-individual" models examine how influential a focal individual becomes after receiving the "shock" of increased power associated with a

control for the observed and time-invariant, unobserved trait characteristics of each individual (e.g., interpersonal style, past leadership experiences). This methodology also implicitly controls for the main effect of each individual's social strategy: whether or not she has a virtue or vice orientation. The inclusion of individual fixed effects allows us to focus the analysis on a senator's exogenous transition from chair-in-waiting to committee chair. It thus helps in isolating how the virtue and vice variables moderate the effects of this power shock on a senator's subsequent level of influence. In interpreting these models, it is important to note that the main effects of virtues and vices are subsumed by the individual fixed effects and therefore not reportable. This approach is comparable to traditional moderation analyses in which both main effects and an interaction are entered into a regression model, but superior as the individual fixed effects also account for the main effects of social strategies, as well as a myriad of other unobserved individual differences.

Control Variables

As noted above, fixed effects regressions already account for a significant number of time-invariant traits (e.g., interpersonal style, ethnicity), whether these traits are observed or unobserved. However, individual fixed effects regression models do not account for time-varying traits. As we observed that political influence was associated with tenure and tenure squared—suggesting a curvilinear relationship between time in office and political influence (see Figure S1)—as well as majority party status (see Table S3, Model 1), these variables were included as controls in models used for hypothesis testing. Lastly, we included controls (i.e., Congress fixed effects) for each time-period to account for observed and unobserved

committee chair role. We believe that this modeling approach is a better match to our theory, which considers how the virtues and vices moderate the effects of power on a leader's subsequent influence. Nevertheless, we demonstrate in Table S-5 that comparable results are obtained when we estimate linear mixed effect models instead of models with individual fixed effects.

idiosyncrasies of each particular Congress. These controls account for time-specific factors such as which individual is President, the degree of polarization in Congress, as well as the composition of Congressional leadership to list a few examples among many.

Effect of Vices and Virtues on Leaders' Political Influence

Testing the interaction between social strategies and leadership status, we found that when senators ascended to a committee chair role, highly virtuous senators wielded more political influence than did senators with lower ratings on our composite measure of virtues ($b = .477, p < .001$). Although composite measures of vices and virtues were not highly correlated ($r = -0.08, p > 0.10$), we also estimated a model in which the composite measure of vices was entered as a covariate in this model and found that virtues continued to predict increased cosponsorship upon ascension to a committee chair role (Table S4, Model 13; see Figure 1).

Specifically, courage, humanity, and justice were all independently associated with greater political influence when senators assumed a committee chair role ($bs = .355, .377, .330, ps < .001$, respectively). Similarly, interactions between committee chair role and the virtues of transcendence and wisdom were positive, although marginally significant (see Table S3 in Supplemental Information).

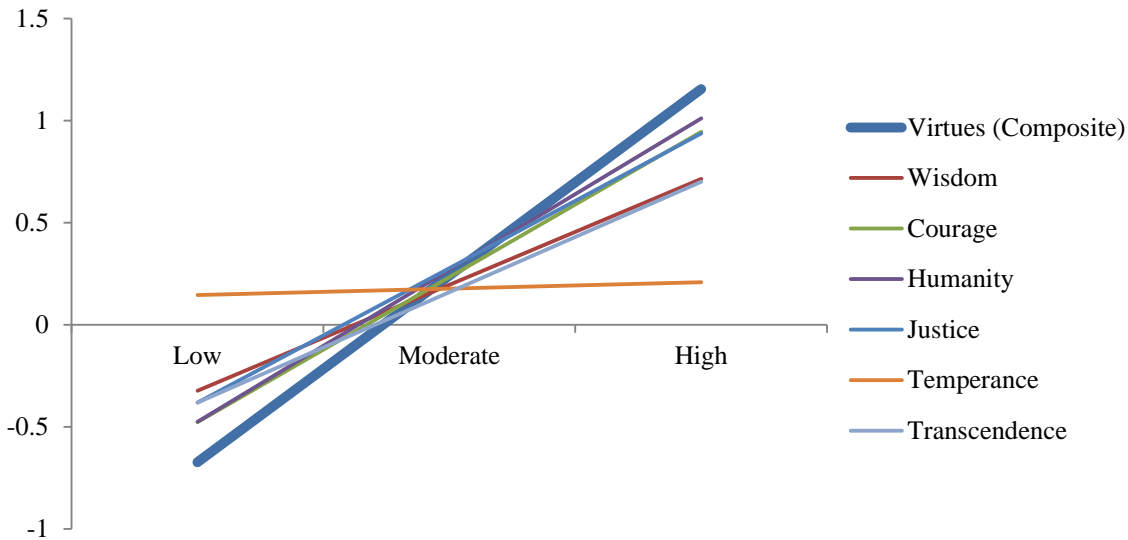


Fig. 1. Graph indicates the *change* in cosponsorship rates experienced after being appointed to a leadership role as a function of a virtuous social strategies. Specifically, lines indicate the marginal effect of becoming a committee chair on cosponsorship for US senators low (2 *SD* below the mean), moderate (at the mean), and high (2 *SD* above the mean) in virtues (mean composite, wisdom, courage, justice, humanity, transcendence, temperance). Point estimates represent the predicted change in co-sponsors following ascension to a committee leader role for senators two standard deviations below the mean, at the mean, and two standard deviations above the mean on the virtues, when all other covariates are set to their mean values.

There was no evidence, however, that vices enabled senators to exert more influence when they gained a leadership role (see Table S4 in Supplemental Information). Overall, composite ratings of vices were unrelated to cosponsorship ($b = -.211, p > .05$), although psychopathy interacted with committee chair role to *negatively* predict cosponsorship ($b = -.215, p < .05$; see Figure 2). In other words, contrary to Machiavelli's advice, a self-serving social strategy was associated with decreased political influence upon ascending to a leadership role.

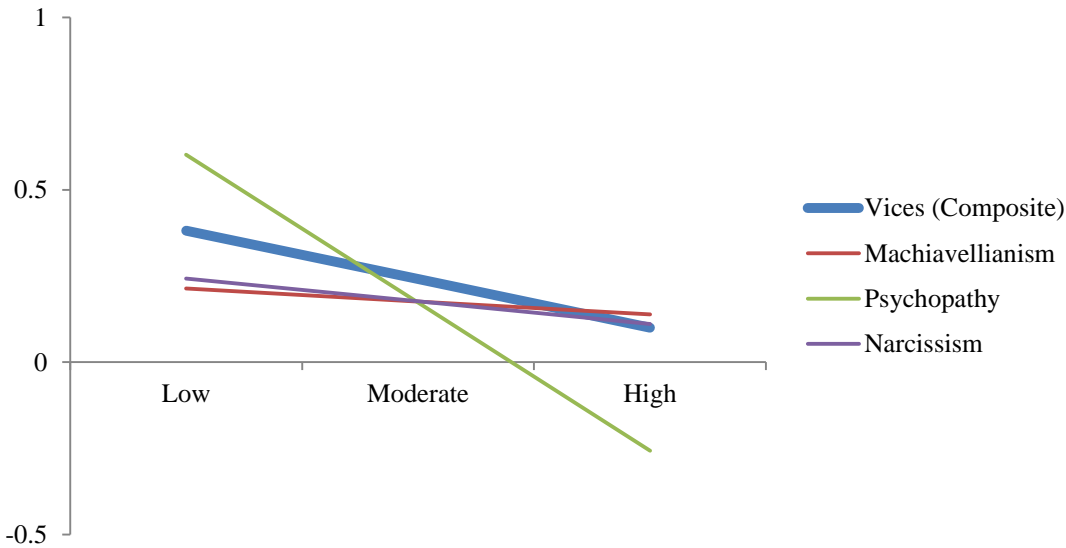


Fig. 2. Graph indicates the *change* in cosponsorship rates experienced after being appointed to a leadership role as a function of a vice-related social strategies. Specifically, lines indicate the marginal effect of becoming a committee chair on cosponsorship for US senators low (2 *SD* below the mean), moderate (at the mean), and high (2 *SD* above the mean) in vices (mean composite, Machiavellianism, narcissism and psychopathy). Point estimates represent the predicted change in co-sponsors following ascension to a committee leader role for senators two standard deviations below the mean, at the mean, and two standard deviations above the mean on the virtues, when all other covariates are set to their mean values.

Discussion

The findings from the present investigation shed fresh empirical light on a long-standing philosophical and theoretical debate about the role of morality and ethics in leadership (Aristotle, trans. 1962; Machiavelli, trans. 1961). Consistent with Aristotle's thesis, virtuous senators became more influential when they were appointed to leadership roles. Expressing empathy and concern for others, being concerned with issues of justice and fairness, and communicating fearless courage, all independently led to increased success in enlisting fellow senators as collaborative co-sponsors on bills the focal senator originated. Our pattern of findings suggests that the efficacy of particular virtues may be context-specific. In particular, courage, humanity and justice are all virtues that are necessary to act in the interest of others and may be especially relevant for the success of politicians.

Machiavellian approaches to leadership, on the other hand, had no effect on, or were even counterproductive to, political influence. These findings suggest that senators who exhibited signs of using manipulative, deceitful, or forceful strategies to assert political influence were generally unsuccessful. Senators who displayed a lack of empathy and a competitive orientation toward others (i.e., psychopathic traits), in particular, were unlikely to garner support from their peers after they became leaders. In sum, our results suggest that leaders who are most likely to act in the interest of others were likely to receive cooperation from their colleagues, while those who are most likely to act in self-interest and in opposition to others were least likely to receive support.

These findings held in our regression framework over a 10-year period in American politics, for politicians of both genders, both political parties, and across different congresses, which varied in terms of which party was in control. Our findings also converge with other, similarly focused studies: past research has found that U.S. Presidents exhibiting interpersonal-affective deficits, related to psychopathy, were less likely to initiate new legislation and programs; the present findings suggest that this may be due in part to their inability to enlist support from others (Lilienfeld, Waldman, Landfield, Watts, Rubenzer, & Faschingbauer, 2012).

An alternate causal mechanism for these findings might draw upon the psychological effects of experiencing power (Keltner, Gruenfeld, & Anderson, 2003). That is, increased feelings of power that are experienced as a function of being promoted to a leadership role may affect the extent to which a senator engages in virtuous or vicious behavior, and ultimately increase or decrease political influence. However, the consistency of our vice and virtue coding over five congresses—during which time senators experienced the “power shock” of ascending

to a leadership position—suggests that these behavioral traits are stable and represent a truly consistent social strategy, rather than a transient behavior profile.

Although the present findings lend support to the Aristotelian approach to political leadership, it is important to bear in mind the particulars of the context studied—US politics in a specific historical era. We cannot rule out the possibility that, in other contexts or during other historical periods, more Machiavellian approaches to influence may yield better outcomes. Specifically, we conjecture that more Machiavellian strategies of influence—for example, manipulation, deception, and the strategic use of force—may prevail in less democratic, more violent, and less scrutinized political contexts.

Findings suggest that citizens would be wise to weigh a candidate's virtue among the factors that guide their voting behavior. Voting for a virtuous candidate not only increases the likelihood that legislators will have genuine concern for others but also increases the chances that they will cooperate effectively in promoting democratic aims.

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Author Contributions

All authors contributed equally to study design. LtB and DK created coding scheme and organized coding effort. CL and SS conducted data analyses and created regression tables. All authors contributed to data interpretation. LtB and DK wrote a first draft of the manuscript and CL and SS provided critical revisions.

References

- Ambady, N., & Rosenthal, R. (1992). Thin slices of expressive behavior as predictors of interpersonal consequences: A meta-analysis. *Psychological Bulletin, 111*, 256-274.
- Anderson, C., & Brown, C. E. (2010). The functions and dysfunctions of hierarchy. *Research in Organizational Behavior, 30*, 55-89.
- Aristotle (trans. 1962). *Politics*. Penguin Classics: London.
- Asendorpf, J. B. (1987). Videotape reconstruction of emotions and cognitions related to shyness. *Journal of Personality and Social Psychology, 53*, 542-549.
- Babiak, P., Neumann, C. S., & Hare, R. D. (2010). Corporate psychopathy: Talking the walk. *Behavioral Sciences & the Law, 28*, 174-193.
- Baltes, P. B., & Staudinger, U. M. (1993). The search for a psychology of wisdom. *Current Directions in Psychological Science, 75-80*.
- Bartlett, M. Y., & DeSteno, D. (2006). Gratitude and prosocial behavior helping when it costs you. *Psychological Science, 17*, 319-325.
- Brunswik, E. (1952). *The conceptual framework of psychology*. Vol. 1, No. 10. Univ. of Chicago Press: Chicago.
- Caspi, A., & Bem, D. J. (1990). Personality continuity and change across the life course. In L. A. Pervin (Ed.), *Handbook of personality theory and research* (pp. 549-575). New York: Guilford.
- Chase, I. D. (1991). Vacancy chains. *Annual Review of Sociology, 17*, 133-154.
- Chen, S., Lee-Chai, A. Y., & Bargh, J. A. (2001). Relationship orientation as a moderator of the effects of social power. *Journal of Personality and Social Psychology, 80*, 173-187.

- Chown, J. D., & Liu, C. C. (2015). Geography and Power in an Organizational Forum: Evidence from the U.S. Senate Chamber. *Strategic Management Journal*, *36*, 177-196.
- Christie, R., & Geis, F. L. (1970). *Studies in Machiavellianism*. Academic Press: New York.
- Cohen, T. R., Panter, A. T., & Turan, N. (2012). Guilt proneness and moral character. *Current Directions in Psychological Science*, *21*, 355-359.
- Curry, O., Chesters, M. J., & Viding, E. (2011). The psychopath's dilemma: The effects of psychopathic personality traits in one-shot games. *Personality and Individual Differences*, *50*, 804-809.
- Dunn, J. R., & Schweitzer, M. E. (2005). Feeling and believing: the influence of emotion on trust. *Journal of Personality and Social Psychology*, *88*, 736-748.
- Fleiss, J. L. (1986). *The design and analysis of clinical experiments*. New York: Wiley.
- Fowler, J. H. (2006). Legislative Cosponsorship Networks in the US House and Senate. *Social Networks*, *28*, 454-465.
- Fowler, J. H. (2006). Connecting the Congress: A Study of Cosponsorship Networks. *Political Analysis*, *14*, 456-487.
- Funder, D. C., & Sneed, C. D., (1993) Behavioral manifestations of personality: an ecological approach to judgmental accuracy. *Journal of Personality and Social Psychology*, *64*, 479-490.
- Fridlund, A.J. (1992). The behavioral ecology and sociality of human faces. In M.S. Clark (Ed.), *Emotion*. Newbury Park, CA: Sage.
- Hare, R. D. (2006). Psychopathy: A clinical and forensic overview. *Psychiatric Clinics of North America*, *29*, 709-724.

- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review, 110*, 265-284.
- Keltner, D., & Kring, A. M. (1998). Emotion, social function, and psychopathology. *Review of General Psychology, 2*, 320-342.
- Lilienfeld, S. O., Waldman, I. D., Landfield, K., Watts, A. L., Rubenzer, S., Faschingbauer, T. R. (2012). Fearless dominance and the U.S. Presidency: Implications of psychopathic personality traits for successful and unsuccessful political leadership. *Journal of Personality and Social Psychology, 103*, 489-505.
- Liu, C. C., & Srivastava, S. B. (2015). Pulling Closer and Moving Apart: Interaction, Identity, and Influence in the U.S. Senate, 1973 to 2009. *American Sociological Review, 80*, 192-217.
- Machiavelli, N. (trans. 1961). *The Prince*. Penguin Classics: London.
- Mathieu, C., Neumann, C. S., Hare, R. D., & Babiak, P. (2014). A dark side of leadership: corporate psychopathy and its influence on employee well-being and job satisfaction. *Personality and Individual Differences, 59*, 83-88.
- McCullough, M. E., Emmons, R. A., & Tsang, J. A. (2002). The grateful disposition: a conceptual and empirical topography. *Journal of Personality and Social Psychology, 82*, 112-127.
- Park, N., Peterson, C., & Seligman, M. E. (2004). Strengths of character and well-being. *Journal of Social and Clinical Psychology, 23*, 603-619.
- Paulhus, D. L., Neumann, C. S., & Hare, R. D. (2015). *Manual for the Hare Self-Report Psychopathy scale*. Multi-Health Systems: Toronto, ON.

- Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality, 36*, 556-563.
- Piff, P. K. et al. (2015). Awe, the small self, and prosocial behavior. *Journal of Personality and Social Psychology, 108*, 883-899.
- Raskin, R., & Hall, C. S. (1979). A Narcissistic Personality Inventory. *Psychological Reports, 45*, 590.
- Scarr, A., & McCartney, K. (1983). How people make their own environments: A theory of genotype→ environment effects. *Child Development, 54*, 424-435.
- Schaumberg, R. L., & Flynn, F. J. (2012). Uneasy lies the head that wears the crown: the link between guilt proneness and leadership. *Journal of Personality and Social Psychology, 103*, 327-342.
- ten Brinke, L., Black, P. J., Porter, S., & Carney, D. R. (2015). Psychopathic personality traits predict competitive wins and cooperative losses in negotiation. *Personality and Individual Differences, 79*, 116-122.
- Theriault, S. M. (2013). *The Gingrich Senators: The roots of partisan warfare in congress*. Oxford University Press: Oxford, UK.
- Van Kleef, G. A., De Dreu, C. K., Pietroni, D., & Manstead, A. S. (2006). Power and emotion in negotiation: Power moderates the interpersonal effects of anger and happiness on concession making. *European Journal of Social Psychology, 36*, 557-581.
- Van Vugt, M., Hogan, R., & Kaiser, R. B. (2008). Leadership, followership, and evolution: Some lessons from the past. *American Psychologist, 63*, 182-196.

Table 1. Sample of behavioral manifestations of vices and virtues.

	Descriptors	Behavioral Signals
Virtues		
Wisdom & Knowledge	creative; curious; open-minded; love of learning; perspective	laughter; use of humor; brows furrow in concentration
Courage	brave; persistent; honest; zest	loud voice; no stutters/stammers; eyes narrowed in determination
Humanity	love; kindness; social intelligence	expresses sympathy with face; sympathetic tone of voice
Justice	teamwork; fairness; leadership	righteous anger/indignation; offering solutions involving compromise with others
Temperance	forgiveness; modesty; prudence; self-regulation	expression of humility (slight smile, head down, eyes downward, shoulder shrug); modest dress/style
Transcendence	appreciation of beauty; gratitude; hope; religiousness	awe (raised inner eyebrow, widened eyes and an open, slightly drop-jawed mouth, visible inhalation); gratitude (head bowed; subtle smile; eyebrows may move upward)
Vices		
Psychopathy	lacking empathy; impulsive; aggressive	lack of emotional expression; schadenfreude (pleasure/smiles in response to failure/pain of others)
Machiavellianism	dominant; manipulative; calculating; emotionally detached	expansive, upright posture; lack of self-conscious emotions
Narcissism	grandiosity; entitlement; superiority	flashy dress; coy looks; use of first person pronouns

Note: refer to Table S1 for complete list of coded behaviors and references supporting each.