# PERSONALITY PROCESSES AND INDIVIDUAL DIFFERENCES

# Fearless Dominance and the U.S. Presidency: Implications of Psychopathic Personality Traits for Successful and Unsuccessful Political Leadership

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Although psychopathic personality (psychopathy) is marked largely by maladaptive traits (e.g., poor impulse control, lack of guilt), some authors have conjectured that some features of this condition (e.g., fearlessness, interpersonal dominance) are adaptive in certain occupations, including leadership positions. We tested this hypothesis in the 42 U.S. presidents up to and including George W. Bush using (a) psychopathy trait estimates derived from personality data completed by historical experts on each president, (b) independent historical surveys of presidential leadership, and (c) largely or entirely objective indicators of presidential performance. Fearless Dominance, which reflects the boldness associated with psychopathy, was associated with better rated presidential performance, leadership, persuasiveness, crisis management, Congressional relations, and allied variables; it was also associated with several largely or entirely objective indicators of presidential performance, such as initiating new projects and being viewed as a world figure. Most of these associations survived statistical control for covariates, including intellectual brilliance, five factor model personality traits, and need for power. In contrast, Impulsive Antisociality and related traits of psychopathy were generally unassociated with rated presidential performance, although they were linked to some largely or entirely objective indicators of negative job performance, including Congressional impeachment resolutions, tolerating unethical behavior in subordinates, and negative character. These findings indicate that the boldness associated with psychopathy is an important but heretofore neglected predictor of presidential performance, and suggest that certain features of psychopathy are tied to successful interpersonal behavior.

Keywords: psychopathy, antisocial behavior, leadership, politics, personality

Psychopathic personality (psychopathy) is a constellation of personality traits encompassing superficial charm, egocentricity, dishonesty, guiltlessness, callousness, risk taking, poor impulse

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control (Cleckley, 1941/1988; Hare, 2003), and, according to many authors (Fowles & Dindo, 2009; Lykken, 1995; Patrick, 2006), fearlessness, social dominance, and immunity to anxiety. In contrast to the *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition, text revision (*DSM–IV–TR*; American Psychiatric Association, 2000), diagnosis of antisocial personality disorder (ASPD), which is primarily a behavioral condition that emphasizes a long-standing history of antisocial and criminal behavior, psychopathy is primarily a dispositional condition that emphasizes personality traits. Nevertheless, measures of these two conditions tend to be at least moderately correlated (Lilienfeld, 1994).

Factor analyses of the most extensively validated measure of psychopathy, the Psychopathy Checklist–Revised (PCL-R; Hare, 2003), have often revealed two broad and moderately correlated dimensions. The first dimension (Factor 1) assesses the core interpersonal and affective features of psychopathy (e.g., guiltlessness, narcissism, glibness), whereas the second dimension (Factor 2) assesses an impulsive and antisocial lifestyle that is closely associated with ASPD (Harpur, Hare, & Hakstian, 1989; but see Cooke & Michie, 2001, and Hare, 2003, for alternative factor

solutions). Although the PCL-R is a semistructured interview that incorporates file information, its two major dimensions can be closely approximated by scores on normal range personality dimensions, such as those derived from the five-factor model (FFM) of personality. PCL-R Factor 1 is associated primarily with low scores on FFM Agreeableness, whereas PCL-R Factor 2 is associated primarily with low scores on both FFM Agreeableness and Conscientiousness (Miller, Lynam, Widiger, & Leukefeld, 2001). Most research demonstrates that psychopathy and its constituent traits are underpinned by dimensions rather than taxa (natural categories; see Edens, Marcus, Lilienfeld, & Poythress, 2006), offering empirical support for recent efforts to conceptualize and assess this condition within a general dimensional model of personality structure.

Most research on the behavioral manifestations of psychopathy has focused on its relations with antisocial, criminal, and otherwise unsuccessful actions. Studies demonstrate that psychopathy is a risk factor for criminality and violent recidivism among prison inmates (Porter & Woodworth, 2006; Salekin, Rogers, & Sewell, 1996) as well as cheating among college students (Williams, Nathanson, & Paulhus, 2010). In addition, some authors have argued that psychopathy is associated with malignant workplace behavior. Babiak and Hare (2006) referred to psychopaths in business settings as "snakes in suits" and suggested that their propensity toward dishonesty and manipulativeness makes them destructive coworkers and bosses (see also Boddy, 2006; Heinze, Allen, Magai, & Ritzler, 2010).

Despite the lengthy research tradition linking psychopathy to unsuccessful behavior, a consistent strand of clinical lore has tied psychopathy, or at least certain features of it, to socially successful behavior across a variety of domains, including the business world, politics, and everyday life (Lilienfeld, 1998). In his classic writings, Cleckley (1941/1988) referred to individuals with marked psychopathic traits whose "outward appearance may include business or professional careers that continue in a sense successful, and which are truly successful when measured by financial reward or even by the casual observer's opinion of real accomplishment" (p. 191). Extending these observations, Lykken (1982) referred to psychopaths and heroes as "twigs from the same branch" (p. 22) and conjectured that the fearlessness associated with psychopathy can predispose to heroic behaviors. Other authors have raised the possibility of "subclinical" (Widom, 1977) or "successful" (Hall & Benning, 2006; Mullins-Sweatt, Glover, Miller, Derefinko, & Widiger, 2010) psychopaths, individuals with pronounced psychopathic traits who function effectively in circumscribed "adaptive niches" of society, such as politics, business, law enforcement, and high-risk sports. In one of the few studies to address this issue empirically, Babiak, Neumann, and Hare (2010) examined a sample of 203 corporate professionals and found that scores on the PCL-R and its component factors were associated not only with a more problematic management style and with being a poor team player but also with *superior* communication skills, creativity, and strategic thinking. These important results raise the possibility that psychopathy, or at least some features of it, are associated with certain aspects of adaptive functioning in workplace settings, although they may also be associated with certain aspects of maladaptive functioning. Nevertheless, because the PCL-R ratings in this study were conducted by a single individual who was not blind to other information about participants, including information potentially relevant to criterion ratings, these results should be viewed as preliminary.

Still others have speculated that some psychopathic traits, such as interpersonal dominance, persuasiveness, and venturesomeness, may be conducive to acquiring positions of political power and to successful leadership (Hogan, Raskin, & Fazzini, 1990; Lobacweski, 2007). Indeed, Lykken (1995) speculated that British Prime Minister Winston Churchill and U.S. president Lyndon Baines Johnson possessed certain personality features of psychopathy: They started off life as "daring, adventurous, and unconventional youngsters who began playing by their own rules" (p. 116) but later managed to parlay these traits into political success.

Nevertheless, the successful manifestations of psychopathy remain largely in the realm of clinical conjecture. Moreover, with the exception of the study by Babiak et al. (2010), the scattered research in this domain (e.g., Ishakawa, Raine, Lencz, Bihrle, & LaCasse, 2001; Widom, 1977) has focused almost exclusively on psychopathic individuals who have engaged in minimal antisocial behavior or managed to escape detection by the legal system, rather than those who are clearly successful from an interpersonal or societal standpoint (Hall & Benning, 2006).

Recent work on a widely used and well-validated self-report psychopathy measure, the Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996), may shed light on this issue. Exploratory factor analyses of the PPI (Benning, Patrick, Hicks, Blonigen, & Krueger, 2003) in community samples have identified two largely uncorrelated higher order dimensions, Fearless Dominance (FD) and Impulsive Antisociality<sup>1</sup> (IA; but see Neumann, Malterer, & Newman, 2008, for an alternative factor structure of the PPI). FD, which assesses what Patrick, Fowles, and Krueger (2009) term "boldness," comprises such traits as social dominance, charm, physical fearlessness, and immunity to anxiety; IA comprises such traits as egocentricity, manipulativeness, poor impulse control, rebelliousness, and tendency to externalize blame. Although these two factors bear some similarities to the two major PCL-R factors, they are not isomorphic with them empirically or conceptually. In particular, although IA and PCL-R Factor 2 are moderately to highly correlated, FD and PCL-R Factor 1 are only weakly correlated (Malterer, Lilienfeld, Newman, & Neumann, 2010), largely because FD assesses a more psychologically adaptive set of traits than does PCL-R Factor 1 (Patrick, 2006).

Several studies have demonstrated that the boldness assessed by FD is associated with healthy psychological adjustment—and may reflect many of the traits commonly attributed to successful psychopathy—whereas IA is associated with psychological maladjustment. Offering provisional corroboration for Lykken's (1982) conjecture regarding fearlessness and heroism, Patrick, Edens, Poythress, Lilienfeld, and Benning (2006) found that in a sample of 96 prisoners, FD scores derived from the PPI were significantly and positively associated with self-reported heroic behaviors (e.g., breaking up fights in public, helping stranded motorists), whereas IA scores were significantly and negatively associated with these behaviors. In addition, PPI-derived FD is negatively correlated

<sup>&</sup>lt;sup>1</sup> In the revised version of the PPI (Lilienfeld & Widows, 2005), this dimension is termed *Self-Centered Impulsivity*. Nevertheless, we use the term *Impulsive Antisociality* here to retain continuity with most of the extant literature (e.g., Benning et al., 2003).

with measures of Axis I psychopathology, such as anxiety, depressive, and somatoform symptoms, as well as suicide attempts, whereas IA is positively associated with these indices (Benning et al., 2003; Douglas, Lilienfeld, Skeem, Edens, Poythress, & Patrick, 2008; Patrick et al., 2006).

These findings are consistent with a "dual-process model" (Fowles & Dindo, 2009; see also Patrick et al., 2009, for an extended "triarchic model") that conceptualizes psychopathy as the joint outcome of two separable etiological processes: (a) a bold temperament marked by largely adaptive functioning, assessed by FD and, to a substantially lesser extent, PCL-R Factor 1 and (2) a disposition toward disinhibition and externalizing behavior marked by largely maladaptive functioning, assessed by IA and PCL-R Factor 2. Nevertheless, the differential associations of these two components of psychopathy with both successful and unsuccessful interpersonal functioning, including job performance and leadership, have yet to be examined empirically. Patrick et al. (2009) conjectured that the boldness assessed by FD may be especially helpful in "the identification of individuals with psychopathic tendencies who ascend to positions of leadership and influence in society" (p. 925), but this intriguing hypothesis has yet to be put to an empirical test.

In this study, we examined the implications of psychopathic personality traits for job performance and leadership in a remarkable sample of individuals whose successful and unsuccessful behaviors are a matter of well-documented public record: the 42 U.S. presidents up to and including George W. Bush. Inspired by the pioneering research of Simonton (1986, 1987) on presidential personality, Rubenzer, Faschingbauer, and Ones (2000) found that some personality traits, most notably high levels of openness to experience (see also Simonton, 2006), extraversion, conscientiousness, and perhaps low levels of agreeableness, are modestly correlated with independently rated job performance among the U.S. presidents. Nevertheless, no study has examined the relation of psychopathic personality traits to leadership and job performance among the U.S. presidents.

We hypothesized that certain features of psychopathy, especially those assessed by FD, would be associated with successful functioning, including overall presidential leadership effectiveness, but that other features of psychopathy, especially those assessed by IA and proxies of PCL-R Factor 2, would be associated with unsuccessful functioning, including poor presidential job performance, negative personal character and integrity, and ethical misbehavior. To test these hypotheses, we drew on an existing data set of personality items obtained from biographers and experts on each president (Rubenzer & Faschingbauer, 2004) and extracted estimates of psychopathy factors based on empirically established equations from the published literature. We then correlated these psychopathy scores with (a) indices from several recent (2008-2011) and largely and in some cases entirely independent panels of eminent historians who had rated each president on dimensions relevant to work performance and leadership, including overall job effectiveness, leadership ability, public persuasiveness, crisis management, vision, and domestic and foreign policy accomplishments; (b) an empirically derived composite developed by Simonton (1987) of six largely or entirely objective indices of presidential greatness, including war heroism, number of years served, and assassination; and (c) several other largely or entirely objective indicators of both presidential success and failure, including reelection, introduction of legislation and programs, Congressional impeachment resolutions, and rated negative presidential character (as assessed by largely objective behaviors indicative of dishonesty and unreliability). By examining largely or entirely objective indicators, we addressed the criticism that any associations between psychopathy traits and rated presidential performance are merely a function of shared subjective impressions of the presidents by different raters.

We also evaluated the specificity of these findings to psychopathic personality traits, especially FD, per se. In particular, we examined the incremental validity of a number of theoretically relevant variables above and beyond FD in an effort to rule out rival hypotheses concerning the potential linkages between FD and presidential performance. In this respect, we adopted a "destructive testing" approach (see C. A. Anderson & Anderson, 1996) in an effort to ascertain how well the relations between FD and presidential performance survive covariance adjustments from "competitor" variables that provide alternative explanations.

Specifically, because it is unclear whether personality traits contribute to the prediction of presidential performance above and beyond intelligence, which is an established predictor of such performance (Simonton, 2006), we examined the incremental validity of psychopathic personality traits beyond established estimates of each president's intelligence. In addition, we examined the incremental validity of psychopathic personality traits above and beyond FFM traits, especially extraversion and openness to experience, which are positively associated with FD (Lilienfeld & Widows, 2005) as well as traits of ASPD, which as noted earlier overlap with those of psychopathy. We also examined the incremental validity of FD above and beyond rated need for power, which has clear-cut conceptual relations to interpersonal dominance and perhaps the FD dimension of psychopathy. As Winter (2005) observed, "power-motivated presidents...invest a great deal of energy in the job, and they enjoy it" (p. 561). Need for power has been demonstrated to be a robust predictor of presidential success (Winter, 2005). Finally, we examined the incremental validity of FD for presidential performance above and beyond Simonton's (1987) six-element equation of largely or entirely objective historical indicators. As Simonton (2008) observed, multiple empirical efforts have failed to unearth any consistent indicators that predict presidential greatness above and beyond this equation. This lattermost incremental validity analysis provides an especially stringent test of the unique contribution of psychopathic personality traits to presidential performance.

# Method

# Raters

Raters of presidents' personality traits in this study were 121 experts recruited by Rubenzer and Fashingbauer (2004) to evaluate the personality of the 42 U.S. presidents up to and including George W. Bush; Barack Obama was not included because of the unavailability of FFM data on him from presidential experts (although there were 43 presidencies up to and including George W. Bush, there were only 42 presidents, as Grover Cleveland was elected president twice in nonconsecutive terms). Importantly, these experts were asked to rate their target president's preoffice (see the Procedure section) personality traits using well-validated

personality measures (see the Measures of Personality, Psychopathy, and Covariates section). Because some raters completed ratings on more than one president, the total number of ratings was 177. These experts were American biographers, journalists, and scholars who are established authorities on one or a few of U.S. presidents. They had authored published biographies on each president or had been nominated by other presidential experts as particularly well informed regarding a given president. The number of expert raters per president ranged from zero to 13, with a mean of 4.2 (SD = 2.9; Rubenzer et al., 2000).

# Measures of Personality, Psychopathy, and Covariates

Revised NEO Personality Inventory (NEO PI-R) Form R. The NEO PI-R is a 240-item questionnaire that assesses the five major dimensions of personality (Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness) from the FFM (Costa & McCrae, 1992). Nested within each of the five domains are six facet scales, each containing eight items cast in nontechnical language and endorsed on a 5-point Likert-type scale. Support for the NEO PI-R's construct validity is extensive at both the domain and facet levels (Costa & McCrae, 1992; Lynam & Widiger, 2001). As discussed in the section below, scores on all four psychopathy indices were derived from ratings on the NEO PI-R.

In this study, raters (121 presidential experts; see the Raters section) completed Form R, an observer report version of the NEO PI-R "designed to be completed by family member, friend, acquaintance—or anyone who knows the person well" (Rubenzer & Faschingbauer, 2004, p. 5). In this sample, the internal consistencies (Cronbach's alphas) of the five NEO PI-R domain scales ranged from .91 to .94.

FFM-derived prototypes of psychopathy factors and ASPD. Using a rational/theoretical approach, Derefinko and Lynam (2006; see also Widiger & Lynam, 1998) mapped the 30 facets of the FFM onto the two major factors of the PCL-R. As noted earlier, PCL-R Factor 1 assesses the core interpersonal and affective features of psychopathy, whereas PCL-R Factor 2 assesses an antisocial and impulsive lifestyle.

The scores on FFM Factors 1 and 2 (which parallel the corresponding two factors of the PCL-R) are weighted composites of several of the FFM facets, namely, those deemed relevant to psychopathy. For example, FFM Factor 1 is a weighted composite of FFM facets from the domains of neuroticism, extraversion, agreeableness, and conscientiousness, all reversed in scoring (see Derefinko & Lynam, 2006, Table 1, p. 265). These FFM factor scores display good validity; for example, both correlate highly (*r*s between .5 and .6) with total scores on the PPI and the Self-Report Psychopathy Scale (SRP; Hare, Harpur, & Hemphill, 1989) and exhibit significant positive correlations with their respective Factor 1 and Factor 2 scores on the PPI and SRP (Derefinko & Lynam, 2006).

To assess ASPD, scores on the prototype developed by Miller et al. (2001) were used. These authors constructed an expert-generated FFM prototype of psychopathy and the 10 *DSM-IV-TR* personality disorders by asking experts to rate the prototypical expression of each personality disorder on a 1–5 scale using the 30 facets of the NEO PI-R. Any FFM facet with a mean lower than 2 or higher than 4 was included in each disorder's prototype. Scores that most closely match the expert-generated psychopathy prototype correlate significantly and positively with several laboratory

tasks theoretically relevant to psychopathy (e.g., measures of temporal discounting and proactive aggression) and self-reported aggression (Derefinko & Lynam, 2006; Miller & Lynam, 2003). In this study, expert-generated psychopathy FFM prototypes of Factors 1 and 2 were used, which parallel the two broad factors of the PCL-R, as well as the FFM prototype for ASPD (see Lynam & Widiger, 2001).

**Factor estimates of FD and IA.** To extract measures of FD and IA, we relied on regression-based formulas developed by Ross, Benning, Patrick, Thompson, and Thurston (2009, p. 80), which use the 30 NEO PI-R facets of the FFM to estimate scores on these two dimensions, heretofore referred to as FFM-FD and FFM-IA.<sup>2</sup> Ross et al. found that these regression formulas, after double cross-validation within their sample, accounted for between 68% and 79% of the variance in FD and IA scores derived from the PPI.

Intellectual brilliance. Intellectual brilliance estimates for each president were drawn from the work of Simonton (1986, 2006), who derived a measure of Intellectual Brilliance from an exploratory factor analysis of adjectives from the Gough Adjective Checklist (Gough & Heilbrun, 1965) completed by multiple independent judges who rated the presidents. Using scores on FFM openness to experience (which tends to be moderately correlated with measured intelligence), Simonton (2004) later used missing-data iterative methods to extrapolate Intellectual Brilliance scores for the presidents from Ronald Reagan onward. The Intellectual Brilliance measure consists of such adjectives as intelligent, wise, complicated, and insightful, and correlates highly with other estimates of the U.S presidents' intelligence derived from biographical information (Simonton, 2006).

**Need for power.** Ratings of power needs were derived from Winter (1987; see also Winter, 1973, 1983), who examined inaugural addresses from American presidents (available before 1981). These speeches were coded by two raters, who demonstrated category agreement over .85 on power imagery. Disagreements between raters were deliberated upon until resolved. Raw scores, used in the analyses here, were defined in terms of power images per 1,000 words.

# **Outcome Measures of Presidential Performance**

**Presidential performance surveys.** To assess outcome variables relevant to presidential performance, we relied primarily on data from two recent, large, and widely publicized American surveys of presidential historians. First, data were used from a 2009 C-SPAN poll of 62 identified presidential historians who rated the presidents on 10 continuous dimensions of job performance (see http://legacy.c-span.org/Content/PDF/C-SPANpresidentialsurveyPR021509.pdf). Fifty-four of these 62 historians were independent of those who rated the presidents on

 $<sup>^2</sup>$  The PPI also contains a subscale, Coldheartedness, that does not load highly on either FD or IA and hence is excluded from computation of these two factors. Analyses of FFM-estimated Coldheartedness did not yield significant associations with any of the primary presidential poll variables examined here with one exception: PPI Coldheartedness was significantly and negatively associated with C-SPAN Poll Pursuit of Equal Justice ( $\chi^2=5.42,\,p=.020$ ). In addition, Coldheartedness was significantly and negatively associated with Siena College Poll Ability to Compromise (see Footnote 3) ( $\chi^2=4.93,\,p=.026$ ).

the NEO-PI-R and other personality items. The 10 dimensions of job performance were overall job performance, public persuasiveness, handling of crises, moral authority, economic management, international relations, administrative skill, Congressional relations, setting of an agenda, and pursuit of equal justice (pairwise rs across these dimensions ranged from .46 to .96, all ps < .001). Second, data were used from a 2010 Siena College survey of 238 anonymous presidential historians who ranked the presidents on 21 dimensions of job performance (see http://www.siena.edu/ uploadedfiles/home/parents\_and\_community/community\_page/ sri/independent\_research/Presidents%20Release\_2010\_final.pdf). For the analyses reported here, we focused on 13 Siena College survey variables for which we had clear-cut predictions: overall ranking, overall ability, leadership ability, party leadership, integrity, executive ability, communication ability, domestic accomplishments, foreign policy accomplishments, handling of the economy, relationship with Congress, willingness to take risks, and avoiding crucial mistakes (pairwise Spearman rs across these rankings ranged from .18 to .97, all ps < .05). To facilitate comparisons between the two surveys, the Siena College rankings were reversed in scoring for the analyses reported here so that higher ranks correspond to superior-rated job performance.

As a third indicator, psychopathy scores with a composite measure of presidential greatness derived from the work of Simonton (2006, p. 515) were correlated. This greatness measure is a sum of standardized (z-scored) results from 12 independent surveys of overall presidential performance. Research demonstrates that independent surveys of presidential performance taken across the decades yield similar results, with correlations of overall rankings typically in the r=.9 range or above (Simonton, 2006).

As a final check on the findings from the C-SPAN and Siena College surveys of presidential performance and Simonton composite measure of presidential greatness, data from two additional recent smaller surveys of U.S. presidential performance from the United Kingdom were examined (see http://americas.sas.ac.uk/research/ survey/index.html). These two surveys have two major advantages: (a) The individuals who completed these polls are entirely independent of those who completed the NEO-PI-R and other personality measures on the presidents, and (b) they do not derive from U.S. historians, and hence offer a largely independent international test of the association between psychopathic personality traits and presidential performance. As a consequence, they should be relatively free of biases shared exclusively by U.S. historians. The first U.K. poll was a 2008 survey conducted by the Times of London that asked eight premier political and international reporters to rank the U.S. presidents in terms of overall quality (The Times of London, 2008). The second U.K. poll was the United States Presidency Centre (USPC) Survey conducted by the Institute for the Study of the Americas (2011) at the University of London. The raters in this survey were 47 U.K. scholars who were established experts in U.S. presidential and political history. They were asked to rate the U.S. presidents on five dimensions: vision/setting of an agenda (heretofore referred to as vision), domestic leadership, foreign policy leadership, moral authority, and long-term positive legacy. In addition, the poll yielded an overall ranking of the presidents in terms of quality. Two presidents (William Henry Harrison and James Garfield) were excluded from this survey because of their brief presidencies. Again, the ranked scores on these two surveys were reversed in scoring so that higher scores corresponded to more successful presidencies.

Historical measures of presidents' job performance and behavior. In addition to the aforementioned surveys of presidential performance, scores on an empirically established (regression-derived) formula developed by Simonton (1987) was examined to predict presidential greatness. This Simonton historical composite consists of a weighted sum of six largely or entirely objective variables of behavior: number of years served, number of war years as president, war heroism prior to becoming president, estimated intellectual brilliance (see below), scandals while in office (coded negatively), and victim of an assassination. Being the victim of an assassination is a well-established indicator of presidential greatness. Indeed, this dichotomous variable correlates positively with a variety of independent indicators of presidential greatness. As Simonton (1994) noted,

Systematic analyses of all U.S. presidents reveal that successful assassination is one of the best things that can happen to a chief executive's (necessarily posthumous) reputation. Getting assassinated adds about as much to a former president's greatness rating as serving five years in office or leading the nation through four years in war (p. 76).

Although at least some of the association between assassination and rated presidential performance is probably reputational (being the victim of an assassination probably leads historians to view a president as great in hindsight), it is probably also partly a function of the fact that presidents who were the targets of assassination were willing to make enemies by initiating bold and controversial changes (see also Simonton, 1994). Indeed, in this data set, the dichotomous variable of being assassinated was associated with rated willingness to take risks in the Siena College survey (point biserial r = .18, p = .019) and with ratings (on a 1–9 scale) by presidential historians on the variable of "shows moral courage" (point biserial r = .20, p = .008).

In addition, six other largely or entirely objective indicators of presidential performance were examined: (a) reelection (Kenney & Rice, 1988), (b) winning an election by a landslide (i.e., by 55% or more of the popular vote; Kenney & Rice, 1988), (c) subject of one or more Congressional impeachment resolutions (Perkins, 2003), (d) initiation of new legislation and programs, (e) viewed by others as a world figure, and (f) tolerates unethical behavior in subordinates. Variables 1–3 were coded dichotomously, and were derived from the historical record. Variables 4–6 were rated on a 1–9 scale and estimated by the same 121 experts who evaluated each president on the NEO PI-R. As a consequence, these latter three variables are not strictly independent of the NEO-PI-R ratings from which psychopathy score estimates were derived.

It was predicted that given its association with the successful features of psychopathy, FFM-FD and perhaps FFM Factor 1 would be positively associated with the Simonton composite sixitem index of greatness and Variables 1, 2, 4, and 5. In contrast, it was predicted that given their theoretical ties to adaptive behavior, FFM-FD and perhaps FFM Factor 1 would be uncorrelated or negatively correlated with Variables 3 and 6 but that given their ties to unsuccessful behavior, FFM-IA and FFM Factor 2 would be positively correlated with these variables.

**Presidential character.** To supplement the largely or entirely objective historical indicators, a composite measure of negative presidential character consisting of various indicators of antisocial

and otherwise problematic behavior was analyzed. From the personality items administered to presidential historians, Rubenzer and Faschingbauer (2004) used a rational/theoretical approach to construct several measures of presidential character and integrity (with items scored on a 1-9 scale), one of which was deemed relevant to the analyses here. Character Scale 1 (Negative Character) comprises 20 items administered to the presidential historians that assess largely objective behavioral indicators, in particular "the types of behaviors that make the news as indicators of character or the lack of it" (p. 332). These items include bullying others; abusing positions of power held; stealing; frequent cursing; extramarital affairs; cheating on sports, taxes, or business; gambling; and frequent absenteeism. It was predicted that FFM-FD and FFM Factor 1 would be largely uncorrelated with this measure, but that FFM-IA and FFM Factor 2 would be positively correlated with this measure. The internal consistency of the Negative Character scale in this sample, as measured by Cronbach's alpha, was .90.

#### **Procedure**

The 121 expert raters completed a 596-item questionnaire evaluating the personality and behavior of their respective president(s) of focus; this measure contained the NEO-PI-R (Costa & McCrae, 1992), a set of items designed to assess presidential character (Rubenzer & Faschingbauer, 2004), and other items that were not analyzed here because they were not directly pertinent to psychopathy. These experts rated their target president's personality for the 5 years prior to his assuming office to minimize criterion contamination in analyses of the associations between personality and presidential performance.

#### Results

# Interrater Reliabilities of Measures of Psychopathy and ASPD

In this sample, the average pairwise interrater reliability correlations, estimated using generalized estimating equations (GEEs; see the Associations between psychopathy factors and surveyrated dimensions of presidential performance section) across presidential raters for FFM Factor 1 (which assesses the core interpersonal and affective features of psychopathy) and FFM Factor 2 (which assesses an antisocial and impulsive lifestyle) were .31 and .42, respectively; for the FFM prototype for ASPD, the average pairwise correlation was .62. These correlations are well within the range of correlations typically reported for interobserver agreement in personality. For example, Kenrick and Funder (1988, Table 2, p. 26) found that mean correlations for personality traits (e.g., dominance, sociability) across raters were mostly in the .30-.50 range. The average pairwise interrater reliability correlations for FFM-FD and FFM-IA across presidential raters, again obtained using GEE, were .56 and .34, respectively.

#### **Correlations Among Psychopathy Measures**

The correlation between FFM Factor 1 and FFM Factor 2 was r = .63 (p < .001). Consistent with previous literature on the PPI factors (e.g., Benning et al., 2003; Miller & Lynam, in press), FFM-FD and FFM-IA were not significantly correlated (r = .09, ns). The correlations between FFM-FD and FFM Factors 1 and 2

were r = .16 (p < .05) and .18 (p < .05), respectively; the correlations between FFM-IA and FFM Factors 1 and 2 were r = .59 (p < .001) and .92 (p < .001), respectively.

# Mean Psychopathy Scores of the Presidents

We next compared presidents' scores on the four major psychopathy variables with those of the normative sample on which NEO-PI-R Form R had been completed. To do so, we computed scores on these four variables from the Form R facet-level normative data reported in the NEO-PI-R manual (see Costa & McCrae, 2000) and compared them with the scores on the 42 presidents from the present sample, in both cases using the formulas described earlier (see the Measures of Personality, Psychopathy, and Covariates section). Presidents scored higher on FFM-FD (M = -0.32, SD = 1.48) compared with the normative sample (M = -0.94). In contrast, their mean scores on FFM-IA (M = -11.55, SD = 2.45) were virtually identical to those of the normative sample (M = -11.69). In addition, presidents scored higher on FFM Factor 1 (M = 111.32, SD = 18.27) compared with the normative sample (M = 97.71). In contrast, their mean scores on FFM Factor 2 (M = 100.23, SD = 27.07) were only slightly higher than those of the normative sample (M = 96.72). These findings tell a reasonably clear story: Compared with the general population, presidents receive higher scores on those aspects of psychopathy ostensibly tied to more adaptive or at least less maladaptive functioning, namely FFM-FD (Cohen's d = .42) and FFM Factor 1 (Cohen's d = .74), with this difference in the medium to large range. In contrast, presidents' scores on those aspects of psychopathy tied more explicitly to maladaptive functioning, namely FFM-IA (Cohen's d = .06) and FFM Factor 2 (Cohen's d = .13), were comparable to those of the general population, with differences in the negligible or small range.

# Associations Between Psychopathy Factors and Survey-Rated Dimensions of Presidential Performance

To account for the nesting of expert presidential raters within presidents and for the differential number of raters per president, we analyzed the associations between psychopathic personality traits and dimensions of presidential performance using general linear modeling with GEE treating the data as nested, with president as a subject variable and rater as a within-subject variable. Generalized linear models allow the outcome variables to be treated as nonnormally distributed and use appropriate distributional and link functions in these cases (e.g., a binomial distribution and logit link in the case of a binary dependent variable, a normal distribution and an identity link in the case of a continuous dependent variable). For outcome variables that departed markedly from normality, we conducted reanalyses using a normal distribution and a log link function; because the results were similar to those assuming a normal distribution, we present only the latter analyses here. In the analyses reported here, we entered each psychopathy variable (FFM-FD, FFM-IA, FFM Factor 1, FFM Factor 2) entered separately (one at a time) as a predictor in the analyses rather than in conjunction with the other psychopathy variables. Nevertheless, in incremental validity analyses designed to ascertain the contribution of a psychopathy variable over and above other covariates, we entered the psychopathy variable of interest (e.g., FFM-FD) in conjunction with the covariate of interest, and its incremental contribution was ascertained using the GEE Type III sum of squares.

Table 1
Associations Between Psychopathy Dimensions and C-SPAN Poll Presidential Variables

	FFM-FD			FFM-IA				FFM-F1		FFM-F2			
Predictor	$\chi^2$	p	$R^2$	$\chi^2$	p	$R^2$	$\chi^2$	p	$R^2$	$\chi^2$	p	$R^2$	
Dependent measure													
Overall performance	6.41(+)	.011	3.6%	0.045	.831	0%	0.805	.370	0%	0.00	.987	0%	
Public persuasiveness	11.29(+)	.001	6.4%	0.686	.408	0%	0.026	.871	0%	1.05	.306	0%	
Crisis management	7.72(+)	.005	4.4%	0.297	.586	0%	0.483	.487	0%	0.249	.681	0%	
Moral authority	2.56	.109	1.4%	1.22	.270	0%	2.00	.158	0%	1.88	.170	1.1%	
Economic management	3.39(+)	.065	2.0%	0.498	.480	0%	1.04	.307	0%	0.015	.901	0%	
International relations	1.42	.234	1.0%	0.014	.916	0%	0.080	.777	0%	0.009	.923	0%	
Agenda setting	9.62(+)	.002	5.4%	0.143	.232	0%	0.002	.962	1.0%	1.12	.290	1.0%	
Administrative skill	1.51	.220	1.0%	0.054	.817	0%	0.407	.524	0%	0.976	.323	1.0%	
Pursuit of equal justice	3.45(+)	.063	2.0%	0.178	.183	0%	0.971	.325	1.0%	0.929	.335	1.0%	
Congressional relations	7.05 (+)	.008	4.0%	0.063	.801	0%	0.660	.417	0%	0.065	.798	0%	

Note. N of presidents = 42; N of ratings = 177. FFM-FD = Five-Factor Model-Fearless Dominance; FFM-IA = Five-Factor Model-Impulsive Antisociality; FFM-F1 = Five-Factor Model Factor 1 (core interpersonal and affective features of psychopathy) Prototype; FFM-F2 = Five-Factor Model Factor 2 (antisocial and impulsive lifestyle) Prototype. Pluses (+) following the chi-square values indicate the direction of the effect, and are indicated for all statistically significant or marginally significant results.

Table 1 shows the associations (along with *R*-square ratios as effect sizes, computed by Wald's  $\chi^2$  divided by the total number of raters; see Rosenthal, 1991) between psychopathy variables and C-SPAN historian ratings of presidential performance. For statistically significant and marginally significant (p > .05 < .10) findings in this and other tables, the direction of the association (+ for positive, – for negative) is indicated in parentheses following the corresponding chi-square values.

As can be seen in Table 1, FFM-IA and FFM Factors 1 and 2 were not significantly associated with any of the C-SPAN ratings. In contrast, as predicted, FFM-FD was significantly and positively associated with a number of domains of C-SPAN-rated presidential performance: overall performance, public persuasiveness, crisis management, agenda setting, and Congressional relations.

The findings for the Siena College Poll rankings, displayed in Table 2, broadly corroborated those of the C-SPAN poll. FFM-IA and FFM Factors 1 and 2 were not significantly associated with presidential performance with a few noteworthy exceptions: FFM Factor 2 was significantly and negatively related to rated presidential integrity, and FFM-IA and FFM Factor 2 were significantly and positively related to rated willingness to take risks. Again, in contrast, FFM-FD was significantly and positively associated with numerous Siena College poll indicators of presidential performance: overall ranking, leadership ability, party leadership, communication ability, Congressional relations, and willingness to take risks.<sup>3</sup> Analyses of Simonton's (1987) z-scored greatness composite of 12 presidential polls yielded similar results: Of the four psychopathy indicators, only FFM-FD was significantly associated with superior overall performance ( $\chi^2 = 7.68$ , p = .006;  $R^2 = 4.3\%$ ).

# **Excluding the Impact of Rater Overlap**

We next wished to rule out the possibility that the associations between FFM-FD and presidential performance were due to overlap between the historians who completed the personality ratings and those who completed the surveys of presidential greatness. This possibility could not be examined for the Siena College poll, as the raters were anonymous. Nevertheless, as noted earlier, eight of the 62 C-SPAN presidential raters were among the same expert historians who rated the presidents on the personality variables, including the NEO-PI-R. Subsidiary analyses excluding these eight raters yielded no substantial changes in the associations between psychopathy variables and C-SPAN variables. For example, even after excluding these raters, FFM-FD continued to predict C-SPAN overall performance ( $\chi^2 = 6.24$ , p = .013,  $R^2 = 3.8\%$ ), public persuasiveness  $(\chi^2 = 11.00, p = .001, R^2 = 6.6\%)$ , crisis management  $(\chi^2 = 7.58,$  $p = .006, R^2 = 4.6\%$ ), agenda setting ( $\chi^2 = 9.57, p = .002, R^2 = .000$ 5.8%), and Congressional relations ( $\chi^2 = 6.87$ , p = .009,  $R^2 =$ 4.1%). These analyses demonstrate that the association between FFM-FD and presidential performance in the C-SPAN cannot be explained by rater overlap.

As a second test of the predictive power of FFM-FD, we examined the results from two additional recent polls of presidential performance from the United Kingdom (see the Method section). As noted earlier, none of the raters in these polls was among those who completed personality measures on the presidents, therefore lending this survey the advantage of being free of rater overlap. For the *Times of London* survey, FFM-FD significantly predicted overall presidential ranking ( $\chi^2 = 4.48$ , p = .034,  $R^2 = 2.5\%$ ). For the USPC survey, FFM-FD was not

 $<sup>^3</sup>$  Complete analyses on the other eight Siena College survey variables (luck, background, imagination, intelligence, court appointments, executive appointments, ability to compromise, historians' current overall view of each president) are available from the first author on request. To summarize, FFM-FD was significantly and positively associated with Siena College Luck ( $\chi^2=7.28, p=.007$ ), Imagination ( $\chi^2=6.10, p=.014$ ), and Ability to Compromise ( $\chi^2=6.82, p=.009$ ). In contrast, FFM Factor 1 was significantly and negatively associated with Ability to Compromise ( $\chi^2=5.71, p=.017$ ). None of the other associations between the four psychopathy indicators and Siena College survey variables was statistically significant.

Table 2
Associations Between Psychopathy Dimensions and Siena College Poll Presidential Variables

	FFM-FD			FFM-IA			FFM-F1			FFM-F2		
Predictor	$\chi^2$	p	$R^2$									
Dependent measure												
Overall ranking	4.09(+)	.043	2.3%	0.299	.584	0%	0.462	.497	0%	0.034	.855	0%
Overall ability	2.52	.113	1.4%	0.143	.231	0%	0.005	.947	0%	0.363	.547	0%
Leadership ability	9.28(+)	.002	5.2%	0.595	.441	0%	0.033	.856	0%	0.576	.448	0%
Party leadership	6.73 (+)	.009	3.8%	1.19	.275	0%	0.251	.616	0%	1.34	.248	1.0%
Integrity	0.825	.364	0%	2.47	.116	0%	2.24	.134	0%	5.21(-)	.022	2.9%
Executive ability	3.71(+)	.054	2.1%	0.770	.380	0%	0.00	.987	0%	0.169	.681	0%
Communication ability	6.60 (+)	.010	3.7%	1.19	.276	1.0%	0.101	.751	0%	0.857	.354	0%
Domestic accomplishments	2.85 (+)	.091	1.6%	1.33	.248	0%	0.105	.745	0%	0.456	.500	0%
Foreign policy accomplishments	1.02	.313	0%	0.012	.913	0%	0.380	.538	0%	0.145	.703	0%
Handling of economy	2.45	.117	1.4%	1.35	.246	0%	0.203	.653	0%	0.505	.477	0%
Relationship with Congress	6.42(+)	.011	3.6%	0.037	.847	0%	0.331	.565	0%	0.005	.945	0%
Willingness to take risks	9.55(+)	.002	5.4%	5.11(+)	.024	2.9%	0.713	.399	0%	4.59(+)	.032	2.6%
Avoiding crucial mistakes	2.72 (+)	.099	1.5%	2.16	.142	1.2%	2.90 (-)	.090	0%	2.34	.126	1.3%

Note. N of presidents = 42; N of ratings = 177. FFM-FD = Five-Factor Model-Fearless Dominance; FFM-IA = Five-Factor Model-Impulsive Antisociality; FFM-F1 = Five-Factor Model Factor 1 (core interpersonal and affective features of psychopathy) Prototype; FFM-F2 = Five-actor Model Factor 2 (antisocial and impulsive lifestyle) Prototype. Pluses (+) and minuses (-) following the chi-square values indicate the direction of the effect, and are indicated for all statistically significant or marginally significant results.

significantly associated with overall ranking, although this association approached significance ( $\chi^2=3.54$ , p=.06,  $R^2=2.0\%$ ). With respect to the five specific USPC dimensions, FFM-FD was significantly associated with vision ( $\chi^2=6.26$ , p=.012,  $R^2=3.6\%$ ) and domestic leadership ( $\chi^2=7.30$ , p=.007,  $R^2=4.2\%$ ), and associated with long-term positive legacy at the level of a statistical trend ( $\chi^2=3.60$ , p=.058,  $R^2=2.0\%$ ). The relations between FFM-FD and moral authority ( $\chi^2=.93$ , p=.335,  $R^2=1.0\%$ ) and foreign policy leadership ( $\chi^2=1.73$ ,  $\chi^2=1.189$ ),  $\chi^2=1.189$ , were nonsignificant (FFM-FD was also not significantly associated with an additive composite of these five dimensions).

# Associations Between Psychopathy Factors and Largely or Entirely Objective Indicators

Although the previous analyses provided evidence that FFM-FD is significantly associated with numerous independent expert ratings of presidential performance and leadership, we sought additional corroboration using largely or entirely objective indicators of presidential behavior. Table 3 shows that, as predicted, FFM-FD was significantly and positively associated with the Simonton six-item composite,4 with rated initiation of new legislation and programs, and with being viewed as a world figure. Contrary to prediction, FFM-FD was not significantly associated with reelection or winning elections by a landslide, although the latter relation was marginally significant. FFM Factor 1, however, was positively associated with winning elections by landslides. As predicted, both FFM-IA and FFM Factor 2 were significantly and positively associated with Congressional impeachment resolutions,<sup>5</sup> tolerating unethical behavior in subordinates, and negative character. Unexpectedly, FFM Factor 1 was positively associated with impeachment resolutions and negative character.

## **Incremental Validity Analyses**

We next addressed the question of how much FFM-FD contributed to presidential performance in the two major polls (C-SPAN and Siena) and the Simonton greatness survey of 12 composite polls beyond each of eight theoretically and empirically relevant predictors: Intellectual Brilliance, the "Big Five" personality dimensions of the FFM, ASPD, and rated need for power. These analyses help to rule out a host of rival hypotheses regarding the association between FFM-FD and presidential performance. In these analyses, we entered FFM-FD and each covariate (taken singly) simultaneously in the GEE analysis, testing the incremental contribution of FFM-FD over and above each covariate.

Controlling statistically for Intellectual Brilliance reduced the associations between FFM-FD and Siena College poll overall ranking ( $\chi^2 = 2.37$ , p = .13) and party leadership ( $\chi^2 = 3.80$ , p = .051) to nonsignificance. FFM-FD remained a significant predictor of all of the significant associations previously reported after controlling statistically for FFM Agreeableness. In contrast, controlling for the other FFM dimensions

<sup>&</sup>lt;sup>4</sup> The Simonton six-element composite includes assassinations, but not assassination attempts. Expanding the analysis to presidents who were the victims of assassination attempts yielded a marginally significant association between FFM-FD and the presence versus absence of such attempts ( $\chi^2 = 3.18$ , p = .074).

<sup>&</sup>lt;sup>5</sup> Analyses that limited this variable to only the three presidents who were either impeached or faced imminent impeachment (Jackson, Nixon, and Clinton) yielded similar results; for FFM-IA,  $\chi^2 = 21.89$  (p < .001); for FFM Factor 1,  $\chi^2 = 4.19$  (p = .041); and for FFM Factor 2,  $\chi^2 = 27.78$  (p < .001)

<sup>&</sup>lt;sup>6</sup> Analyses on the estimated intelligence of each president (see Simonton, 1986) yielded similar results to those for Intellectual Brilliance, and are available from the first author on request.

Table 3
Associations Between Psychopathy Dimensions and Largely or Entirely Objective Indicators of Presidential Behavior

	FFM-FD			FFM-IA			FFM-F1			FFM-F2		
Predictor	$\chi^2$	p	$R^2$	$\chi^2$	p	$R^2$	$\chi^2$	p	$R^2$	$\chi^2$	p	$R^2$
Dependent measure	Dependent measure											
Simonton 6-item composite	5.48 (+)	.019	3.1%	0.953	.329	1.0%	0.037	.847	0%	0.185	.667	0%
Reelection	1.188	.276	1.0%	0.016	.990	0%	0.108	.743	0%	0.079	.778	0%
Election landslide	2.99(+)	.084	1.7%	1.512	.219	1.0%	7.67(+)	.006	4.3%	2.580	.108	1.5%
Impeachment resolutions	0.089	.765	0%	15.16(+)	.001	8.8%	0.110	.740	0%	11.64(+)	.001	6.6%
Initiates new legislation and programs	12.23(+)	.001	6.9%	0.679	.410	0%	$5.59^*(-)$	.018	3.2%	1.06	.304	1.0%
Viewed by others as a world figure	8.23(+)	.004	4.6%	1.74	.187	1.0%	0.649	.421	0%	1.43	.232	1.0%
Tolerates unethical behavior in												
subordinates	0.003	.958	0%	30.42(+)	.001	17.2%	6.54(+)	.011	3.7%	39.81 (+)	.001	22.5%
Negative character	0.106	.745	0%	119.99 (+)	.001	71.2%	3.46 (+)	.001	2.1%	138.25 (+)	.001	21.2%

Note. N of presidents = 42; N of ratings = 177. FFM-FD = Five-Factor Model-Fearless Dominance; FFM-IA = Five-Factor Model-Impulsive Antisociality; FFM-F1 = Five-Factor Model Factor 1 (core interpersonal and affective features of psychopathy) Prototype; FFM-F2 = Five-Factor Model Factor 2 (antisocial and impulsive lifestyle) Prototype. Pluses (+) and minuses (-) following the chi-square values indicate the direction of the effect, and are indicated for all statistically significant or marginally significant results.

reduced some of the FFM-FD associations with presidential performance to nonsignificance, in most cases to the level of statistical trends. Controlling for FFM Extraversion reduced the association between FFM-FD and C-SPAN overall performance  $(\chi^2 = 3.52, p = .061)$  and crisis management  $(\chi^2 = 2.62, p = .061)$ .106) to nonsignificance; it also rendered the association between FFM-FD and Siena College overall rank to nonsignificance ( $\chi^2 = 3.35$ , p = .067). Controlling for FFM Openness to Experience reduced the association between FFM-FD and C-SPAN overall performance ( $\chi^2 = 3.27$ , p = .07), Siena overall ranking ( $\chi^2 = 1.30$ , p = .25) and communication ability  $(\chi^2 = 2.32, p = .13)$  to nonsignificance. Controlling for FFM Neuroticism reduced the association between FFM-FD and Siena College poll Congressional relations ( $\chi^2 = 3.37$ , p =.066) to nonsignificance. Controlling for FFM Conscientiousness reduced the association between FFM-FD and Siena College overall rank to nonsignificance. Finally, controlling for FFM Openness to Experience reduced the association between FFM-FD and C-SPAN overall performance ( $\chi^2 = 3.27$ , p =.07), Siena overall ranking ( $\chi^2 = 1.30$ , p = .25), and communication ability ( $\chi^2 = 2.32$ , p = .13) to nonsignificance. All of the other associations between FFM-FD C-SPAN and Siena College variables remained significant after controlling for FFM variables. Notably, the association between FFM-FD and the Simonton 12 survey greatness composite remained statistically significant after statistical control for each FFM person-

Controlling for the FFM ASPD prototype reduced the association between FFM-FD and Siena College poll party leadership ( $\chi^2=3.82,\ p=.051$ ) to nonsignificance. In addition, controlling for rated need for power reduced the association between FFM-FD and Siena College poll overall ranking to marginal significance ( $\chi^2=3.55,\ p=.059$ ). All other associations controlling for each of these two variables remained statistically significant.

Notably, the association between FFM-FD and the Simonton six-element composite of historical indicators also remained statistically significant after controlling for most covariates. The exceptions were Openness to Experience ( $\chi^2 = 2.11$ , p = .15) and

Intellectual Brilliance ( $\chi^2 = 1.70$ , p = .19); the latter finding must be interpreted in light of the fact that the Simonton six-element composite itself includes Intellectual Brilliance.

In the last major incremental validity analysis, we examined whether FFM-FD displayed incremental validity above and beyond Simonton's six-element equation of largely or entirely objective historical indicators. As noted earlier, there is no consistent evidence that any other indicators predict global presidential performance above and beyond this equation (Simonton, 2008). GEE analyses revealed that after controlling statistically for scores on this equation, FFM-FD was not significantly related to overall performance in any of the four surveys examined here, although its association with C-SPAN overall performance approached significance ( $\chi^2 = 3.51$ , p =.061). Nor was FFM-FD significantly related to the Simonton 12 survey greatness composite above and beyond the sixelement equation. Nevertheless, even after controlling for scores on this equation, FFM-FD remained significantly associated with a number of specific dimensions of presidential performance: C-SPAN Public Persuasiveness ( $\chi^2 = 9.81$ , p =.002), C-SPAN Crisis-Management ( $\chi^2 = 6.12$ , p = .013), C-SPAN Agenda-Setting ( $\chi^2 = 6.86$ , p = .009), Siena College Leadership Ability ( $\chi^2 = 8.24$ , p = .004), Siena College Communication Ability ( $\chi^2 = 4.29$ , p = .038), and Siena College Willingness to Take Risks ( $\chi^2 = 7.11$ , p = .008).

#### Presidents' Scores on FFM-FD

Finally, given that our principal positive findings centered on FFM-FD, Table 4 displays the scores of the 42 presidents (in

 $<sup>^7</sup>$  In contrast, scores on the Simonton equation consistently predicted ratings of presidential performance above and beyond scores on FFM-FD. For example, this equation predicted C-SPAN Overall Performance ( $\chi^2=40.11,\,p<.001$ ), Siena College Overall Rank ( $\chi^2=71.2,\,p<.001$ ), and Simonton Presidential Greatness ( $\chi^2=83.89,\,p<.001$ ) even after controlling for scores on FFM-FD. These analyses demonstrate that Simonton's equation possesses considerable variance relevant to presidential effectiveness that is not shared with fearless dominance.

Table 4
Presidents' Scores on FFM-FD

President	Score
Theodore Roosevelt	(1.462)
John F. Kennedy	(1.408)
Franklin D. Roosevelt	(1.079)
Ronald Reagan	(.912)
Rutherford B. Hayes	(.824)
Zachary Taylor	(.671)
William Jefferson Clinton	(.569)
Martin Van Buren	(.554)
Andrew Jackson	(.516)
George W. Bush	(.391)
George Washington	(.302)
Dwight D. Eisenhower	(.297)
John Tyler	(.283)
Chester Arthur	(.267)
Lyndon B. Johnson	(.173)
Gerald Ford	(.157)
Benjamin Harrison	(.032)
James Earl Carter	(.007)
Woodrow Wilson	(032)
Warren G. Harding	(036)
Thomas Jefferson	(056)
Ulysses S. Grant	(084)
William H. Harrison	(158)
Abraham Lincoln	(321)
James Madison	(355)
Millard Fillmore	(388)
James K. Polk	(388)
Richard Nixon	(544)
Franklin Pierce	(553)
George H. Bush	(619)
Grover Cleveland	(624)
James Monroe	(636)
James Garfield	(664)
Harry S. Truman	(668)
Andrew Johnson	(728)
Herbert Hoover	(866)
John Adams	(927)
James Buchanan	(942)
William McKinley	(996)
Calvin Coolidge	(-1.175)
John Q. Adams	(-1.234)
William H. Taft	(-1.579)
	(1.577)

*Note.* FFM-FD = Five-Factor Model-Fearless Dominance. Scores in parentheses are mean z scores (averaged across raters) for each president on each dimension, standardized within the 42 presidents examined in the study.

z-score units standardized within the 42 presidents, to facilitate comparisons across presidents) on FFM-FD, ranked from highest to lowest. Mean comparisons across presidents should be made with the caveat that they are not based on a fully nested design, as each presidential expert only rated his or her president(s) of focus, rather than all presidents.

With that limitation in mind, the presidents scoring highest on FFM-FD were (in order) Theodore Roosevelt (who towered more than 3 *SD*s over the lowest scoring president, William Howard Taft), John F. Kennedy, Franklin D. Roosevelt, Ronald Reagan, Rutherford B. Hayes, Zachary Taylor, and Bill Clinton. The lowest scorers on FFM-FD were (again, in order) William Howard Taft, John Quincy Adams, Calvin Coolidge, William McKinley, James Buchanan, John Adams, and Herbert Hoover.<sup>8</sup>

#### Discussion

In his seminal work, "The Mask of Sanity," Cleckley (1941/ 1988) described psychopaths as hybrid creatures who are deeply deficient affectively, yet who present with a superficially persuasive façade of normal or even supernormal functioning: "Everything about him (sic) is likely to suggest desirable and superior human qualities, a robust mental health" (p. 339). The recently formulated dual-process model of psychopathy (Fowles & Dindo, 2009; Patrick, 2006; see also Lilienfeld & Fowler, 2006) similarly conceptualizes psychopathy as a distinctive composite of two underlying processes that are dimensionally distributed in the population, one reflecting boldness and largely adaptive functioning, and the other reflecting disinhibition and largely maladaptive functioning. Following in the lines of the classic work of Simonton (1987, 1994) and others (see Barber, 1977; Murray & Blessing, 1983; Rubenzer & Faschingbauer, 2004; Winter, 2005), we tested this model as applied to the U.S. presidents using a combination of personality and job performance ratings from historical experts.

# **Key Findings for FD**

We found that a measure of the boldness associated with certain features of psychopathy, namely an index of FD derived from FFM data (FFM-FD), predicted overall presidential performance in two large independent surveys of U.S. historians as well as a z-scored sum of 12 polls of overall presidential performance. In two additional recent surveys from the United Kingdom, these results were broadly corroborated. In one (the USPC poll), FFM-FD was not significantly associated with a ranking of overall presidential performance (although this association approached significance), but it was significantly associated with vision and domestic leadership. In another survey (the Times of London Poll), FFM-FD was significantly associated with overall presidential ranking. These latter two polls, along with subsidiary analyses of the C-SPAN poll, exclude the possibility that the associations between FD and presidential performance are attributable to rater overlap.

Equally noteworthy are findings that FFM-FD—as measured by expert raters on each president—was significantly associated not only with historians' ratings of superior overall presidential performance but also with several dimensions theoretically relevant to FD: leadership, communication, persuasiveness, crisis management, Congressional relations, agenda setting, as well as a willingness to take risks. Moreover, FFM-FD was associated with an empirically established composite of six largely or entirely objective indicators linked previously to presidential greatness (Simonton, 1987), including war heroism, years served, and assassination; it was also related to the launching of new legislation and programs and to be being viewed as a world figure. In contrast, FFM-FD was not predictive of presidential dimensions relevant to ethical behavior (Moral Authority in the C-SPAN poll, Integrity in the Siena College Poll, Moral Authority in the USPC Poll) in any survey

<sup>&</sup>lt;sup>8</sup> Mean scores of the 42 presidents on the three other dimensions of psychopathy examined here (FFM-IA, FFM Factor 1, and FFM Factor 2) are available from the first author on request.

or to rated unethical actions (e.g., tolerating unethical behavior in subordinates, negative character), suggesting that boldness is not necessarily associated with immoral behavior, at least among residents of the White House. These analyses offer preliminary support for the discriminant validity of FFM-FD from dimensions of presidential performance that are linked to antisocial and otherwise questionable behavior.

These data are the first to our knowledge to demonstrate that at least one feature of psychopathy is tied to superior political leadership (see also Babiak et al., 2010, for data in business settings). In addition, our findings are consistent with Lykken's (1995) fearlessness model of psychopathy, as well as dualprocess models of psychopathy (Fowles & Dindo, 2009) and elaborations of this model (Patrick et al., 2009) positing that boldness is a key component of psychopathy that is linked to adaptive functioning in at least some life domains. They also dovetail with conjectures (e.g., Lykken, 1982, 1995) that the fearlessness associated with psychopathy can predispose to success in politics and perhaps other worldly domains. In addition, our results may be broadly consistent with "neocharismatic" leadership paradigms derived from the industrial/ organizational literature, which link charisma and interpersonal self-confidence to effective leadership (House & Aditya, 1997). Although the FD dimension is considerably broader than charisma given that it also comprises physical fearlessness and immunity to anxiety in addition to social persuasiveness, further research should investigate the extent to which the relation between FD and presidential leadership is attributable to this dimension's inclusion of interpersonal potency.

One potential criticism of our analyses is that presidential experts' ratings of FD might have been inadvertently contaminated on a post hoc basis by their knowledge of presidential performance, or by what political scientists call "endogeneity" (Jackson, 2008). For example, the knowledge that a given president was successful might have led presidential experts to rate him as bolder on personality measures. Nevertheless, for three reasons, this explanation is unlikely to account fully for our findings. First, because estimates of FFM-FD were extracted from measures of normal personality, such as extraversion, agreeableness, and conscientiousness, expert raters were unaware that they were evaluating FD, let alone traits pertinent to psychopathy. Second, FFM-FD was associated with presidential measures with which it is not closely linked intuitively, such as better Congressional relations in both polls and better communication ability in the one poll in which it was measured, rendering it implausible that the association between FFM-FD and presidential indicators was due solely to criterion contamination. Third, in most analyses, FFM-FD displayed incremental validity above and beyond several predictors linked intuitively to superior presidential performance, such as intellectual brilliance, extraversion, conscientiousness, and need for power. In addition, for a number of variables relevant to presidential job performance (e.g., public persuasiveness, crisis management, agenda setting, overall leadership, communication ability, willingness to take risks), FFM-FD even displayed incremental validity above and beyond Simonton's (1987) sixelement equation. Nevertheless, FFM-FD did not exhibit statistically significant incremental validity above and beyond this equation for global presidential performance for any survey, suggesting that Simonton's (2008) verdict that there are no identified predictors of overall presidential performance above and beyond this equation still stands. Nevertheless, our analyses demonstrate that FFM-FD contains psychologically important variance relevant to leadership that is not shared with Simonton's equation, especially variance associated with traits allied conceptually with FD/boldness, such as persuasiveness, communication ability, and leadership under pressure.

Indeed, with several exceptions, the associations between FFM-FD and presidential performance survived statistical control for a number of covariates, including intellectual brilliance, FFM Big Five personality variables, ASPD, and rated need for power. This "destructive testing" methodological approach (C. A. Anderson & Anderson, 1996), although statistically conservative, highlights the unique contribution of FD above and beyond competing constructs. The primary exceptions to these significant incremental associations were FFM Extraversion and Openness to Experience, statistical control of which reduced several of the relations between FFM-FD and presidential performance to nonsignificance. Nevertheless, even here, FFM-FD continued to predict several dimensions of presidential performance, including public persuasiveness, leadership, agenda setting, and, most impressively, a z-scored sum of 12 independent presidential polls of overall performance, after statistical control for FFM Extraversion and for Openness to Experience. Moreover, because the "surgent" or "agentic" component of extraversion is a key component of the boldness associated with psychopathy (Lilienfeld & Andrews, 1996), statistical control for FFM Extraversion probably constitutes "overcontrol," resulting in the elimination of some of the variance relevant to the FD construct itself (see Meehl, 1971).

#### **Key Findings for Other Psychopathy Variables**

Contrary to our predictions, the aspect of psychopathy tied closely to disinhibition and externalizing propensities, as operationalized by FFM-IA and FFM Factor 2, was largely unassociated with poor presidential performance in independent presidential polls of historians. The interpretation of these negative findings for FFM-IA is unclear, although they must be viewed in light of limited statistical power owing to the necessarily small sample size of presidents. It is worth noting that the more plentiful positive findings for FFM-FD than FFM-IA cannot be attributed to differential restriction of range, as the standard deviation of FFM-FD scores in our sample was lower than that of FFM-IA (see the Results section). The absence of significant positive associations suggests that, at least within the range of scores exhibited by U.S. presidents, such traits as poor impulse control, externalization of blame, and interpersonal antagonism may not necessarily bear marked negative prognostic implications for political job performance.

Still, there were notable exceptions, indicating that such traits are not invariably benign. FFM-IA was positively associated with impeachment resolutions introduced before Congress and tolerating unethical behavior in subordinates, the finding for the former variable is especially noteworthy given that it is objective and free of potential rater biases. In addition, FFM-IA was associated with more negative presidential character (a composite variable including extramarital affairs, absenteeism, and

abusing positions of power held), although this correlation may be inflated by shared rater biases, because the ratings of character derived from the same historians who rated the presidents on personality variables. Still, because the negative presidential character variable consisted of largely or objective historical indicators, such biases are unlikely to account entirely for our findings. FFM Factor 2 was also associated with all these variables, as well as with lower rated presidential integrity in the Siena College poll. In aggregate, these findings complement those for FFM-FD in suggesting that psychopathy may be a confluence of markedly different personality traits (Patrick, 2006), with some (especially those assessed by FFM-FD) predisposing to successful interpersonal behavior and others (especially those assessed by FFM-IA and FFM Factor 2) predisposing to unsuccessful interpersonal behavior.

#### **Caveats**

We should be clear about what our results do not mean. They certainly do not imply that psychopathic individuals make especially effective presidents. For one thing, our effect sizes were, in general, small in magnitude (typically ranging from 3%-6% of the variance), suggesting that boldness, at least as assessed by FFM-FD, accounts for modest amounts of variance in presidential leadership. As Simonton (2004) observed, the best predictors of presidential greatness are probably not dispositional but situational, such as being in the right place at the right time. In addition, we did not find that all features of psychopathy are associated with superior presidential performance; to the contrary, features of psychopathy tied to disinhibition (e.g., FFM Factor 2) were sometimes predictive of inferior performance, such as lower integrity, more impeachment resolutions, and negative presidential character (see also Footnote 2 for largely negative findings on PPI-estimated Coldheartedness). Instead, our results suggest only that one noteworthy facet of psychopathy, namely boldness, bears significant implications for presidential performance and leadership.

Nor do our results mean that presidents who are high in only one facet of psychopathy, such as FD, should be regarded as "psychopathic." To the contrary, the dual-process model implies that because psychopathy is a configuration or constellation of two largely independent traits, only individuals who are high on both traits will be perceived as psychopathic. Theodore Roosevelt, for example, was markedly elevated on FFM-FD (z score = 1.462; see Table 4), but only slightly above average on FFM-IA (z score = .213), and therefore would be regarded not as a prototypical psychopath, but rather as an individual with a high score only on its substantially adaptive component.

# Limitations

Our study is marked by a number of limitations, several of which offer fruitful directions for further research. First, the four indicators of psychopathy trait domains were not measured directly, but were only estimated from FFM facets. As a consequence, our findings may underestimate the genuine magnitude of the associations between certain psychopathy dimensions and presidential performance. Future work would benefit from administering more explicit measures of psychopathic

features to presidential raters (see Lilienfeld, 1998, for a discussion of observer rating measures of psychopathy). In addition, future work should examine indicators of psychopathy trait domains derived from personality frameworks other than the FFM to ascertain the generalizability of our findings. In particular, the FFM has been criticized for its lack of coverage of several traits potentially relevant to psychopathy, including morality (Loevinger, 1994; see also Block, 1995) and honesty/humility (Ashton & Lee, 2007). Moreover, because all four psychopathy indices were estimated from the FFM, it is possible that the constructs they assess are more independent "in nature" than implied in our analyses.

Second, because we examined only the U.S. presidents, caution is required in extrapolating our findings to other leadership positions. In future work, it will be important to extend the generalizability of our results to individuals occupying other positions of power, including other politicians, bosses, corporate executives, and military commanders. In addition, it will be necessary to examine whether our findings extend to leaders in non-Western countries. For example, in countries (e.g., China) in which collectivist attitudes are more normative than in largely individualist countries such as the United States (Oyserman, Coon, & Kemmelmeier, 2002), boldness—which often necessitates a willingness to disregard the views of others—may be associated with negative prognostic implications for leadership (see also Winter, 2005).

Third, any investigation of the personality correlates of presidential performance is limited by the fact that such performance is inevitably influenced by luck—both good and bad (Simonton, 2004). Such chance factors almost certainly constrain the magnitudes of the correlations between personality variables, including psychopathy traits, and job performance. At the same time, it is worth noting that in subsidiary analyses not reported here, scores on FFM-FD (but not on the other psychopathy variables) were significantly and positively associated with ratings of "Luck" by the Siena College Poll presidential historians (see Footnote 3). What may superficially appear to be good or bad luck may in part reflect presidents' success or failure in capitalizing on unpredictable occurrences. For example, a major tragedy, such as a natural disaster or terrorist attack on home soil, can help to sink a presidency if handled poorly; alternatively, it can help to make a presidency if handled well.

Fourth, our comparisons of the mean levels of the presidents on FFM-FD (see Table 4) should be interpreted with caution, in part because each expert rater assessed only his or her own president(s) of interest. Because we did not collect data on raters' personality traits, we cannot exclude the possibility that historians with certain traits might be differentially drawn to study certain presidents, display undetected biases in the ratings of these presidents, or both (see Simonton, 2004). In addition, whereas several presidents, such as George Washington, Thomas Jefferson, and Franklin D. Roosevelt, were evaluated by 10 or more raters, other presidents, such as Zachary Taylor, Andrew Johnson, and Chester Arthur, were evaluated by only one rater. The mean scores of the latter presidents should therefore be interpreted with particular caution. Interestingly, FFM-FD (but not the other three psychopathy indices) correlated significantly with the number of raters per president (r =

.26, p < .001), suggesting that this variable may be an indirect marker of presidential impact. The GEE analyses, however, account for the statistical influence of this variable.

These significant caveats aside, it is worth noting that the mean ratings of FD display substantial face validity when evaluated against consensual historical descriptions. For example, the highest FFM-FD scorer in the sample, Theodore Roosevelt, was variously nicknamed "The Lion," "The Dynamo of Power," and "The Driving Force" (among others) as president and was known as the "Cyclone Assemblyman" early in his career as New York State Assemblyman because of his remarkable interpersonal potency and energy level. Historian Ronald Steel (2010) described him as a "man who sucked all of the air out of any room he entered." In Steel's words, Roosevelt was a man of "martial manner and bellicose deeds" who was a "political reformer, a conservationist, a buffalo hunter, a militaristic liberal and yes, a 'war lover' if he thought it would achieve peace and order" (p. 8). In contrast, the lowest FFM-FD scorer in the sample, William Howard Taft, nicknamed the "Reluctant President," was described by historian Donald F. Anderson (1973) as a man who "lacked temperamental aggressiveness, rhetorical skill, and moral flexibility" (p. 189) and was "legalistic, consistent, reflective, and passive" (p. 201). Taft confessed that he was intimidated by the presidency and once told his wife that "politics, when I am in it, makes me sick" (D. F. Anderson, 1973, p. 27). Ironically, Theodore Roosevelt had hand-picked Taft as his successor and, upon returning from a long African safari, was dismayed at Taft's reluctance to stand up to the powerful businessmen whom Roosevelt had fearlessly challenged.

Fifth, as indicated above, our findings are limited in part by monorater bias given that the personalities of six of the 42 presidents were evaluated by only one historian. Hence, it could perhaps be argued that our investigation is in part a study of the vagaries of presidential historians' personalities as well as of presidents' personalities. Nevertheless, for several reasons, this explanation is unlikely to account for our findings for FFM-FD. For example, in subsidiary analyses not reported here, we found that FFM-FD exhibited a pattern of theoretically meaningful convergent and discriminant validity with independently obtained ratings of presidential personality. For example, FFM-FD correlated r = .48 (p < .001) and r = .24 (p < .001), respectively, with the "Forcefulness" and "Poise and Polish" dimensions derived by Simonton (1986) from factor analyses of Adjective Check List (Gough & Heilbrun, 1965) ratings on the presidents; FFM-FD also correlated r = .54 (p < .001) with the "Charismatic" dimension and r = -.18 (p < .05) with the "Deliberativeness" dimension derived by Simonton (1988) from factor analyses of stylistic ratings on the presidents. These findings, based on correlations with ratings obtained from two independent data sets, afford compelling support for the validity of the FFM-FD ratings in our sample, and render it extremely unlikely that our FFM-FD ratings are exclusively a product of the idiosyncrasies of historians' personalities.

In additional subsidiary analyses not reported in full here, we further examined the possibility that monorater bias accounted for our findings. Limiting the GEE analyses to the 36 presidents for whom multiple raters were available did not substantially alter the overall pattern of results; to the contrary, it actually

strengthened somewhat our findings and conclusions. For example, FFM-FD continued to significantly predict C-SPAN Performance ( $\chi^2 = 9.06$ , p = .003), Siena College Overall Ranking ( $\chi^2 = 6.47$ , p = .011), the Simonton 12 survey greatness composite ( $\chi^2 = 9.81$ , p = .002), and the *Times of London* survey overall ranking ( $\chi^2 = 6.21$ , p = .013). In addition, the relation between FFM-FD and the UPSC overall ranking, previously marginally significant, now attained significance ( $\chi^2 = 7.49$ , p = .006).

Sixth, several of our quasi-objective indicators, such as initiating legislation and programs, tolerating unethical behavior in subordinates, and negative presidential character (see Table 3), were rated by the same experts who evaluated each president on the NEO PI-R items from which we derived psychopathy scores. As a consequence, scores on these variables, although substantially objective, may nonetheless have been influenced by subtle and undetected rater biases. Nevertheless, the fact that some psychopathy variables were significantly associated with unambiguously objective indicators, such as Congressional impeachment resolutions, election landslides, and the variables constituting the Simonton six-item composite (e.g., number of years served, number of war years served, victim of assassination), effectively alleviates concerns that all of our results are attributable to the influence of shared rater biases on both predictors and outcomes.

Seventh, ratings of presidential personality and performance by historians are necessarily limited by such variables as the amount of information available about each president and each president's historical recency. In particular, it is virtually inevitable that historians will tend to have more intimate knowledge of presidents who served (a) a longer time in office and (b) more recently. In GEE analyses not reported here, we found that neither variable was significantly associated with FFM-FD scores, although the association between FFM-FD and length in office was positive and marginally significant (p = .094). Nevertheless, in exploratory analyses, we examined the possibility that either variable or both qualified the association between FFM-FD and overall presidential performance. For (a), we created a partialed product term reflecting the multiplication (statistical interaction) between FFM-FD scores and the total number of days in office for each president as coded from the historical record, and entered it following the main effects of both FFM-FD scores and total days in the office in the GEE analyses. In no case did this interaction term significantly moderate the relation between FFM-FD and any measure of overall presidential performance (C-SPAN, Siena, Simonton 12 survey greatness composite, either U.K. survey). For (b), we created a partialed product term reflecting the interaction between FFM-FD scores and presidential order entered as an interval variable from 1 to 42 (with the first president, George Washington, receiving a 1, and the most recent president in the analyses, George W. Bush, receiving a 42), and entered it following the main effects of both FFM-FD scores and presidential order. Again, in no case did this interaction term significantly moderate the relation between FFM-FD and any measure of overall presidential performance. Thus, we found no evidence that the relation between FFM-FD and presidential performance was weaker for either shorter-serving presidents or

less recent presidents. Nevertheless, this issue merits investigation in further research.<sup>9</sup>

Eighth, some researchers have raised questions concerning either the factorial coherence of the FD dimension or the centrality of this dimension to psychopathy. With respect to the former issue, recent confirmatory factor analyses suggest that factor structure of FD, which was derived from the PPI using exploratory factor analysis (Benning et al., 2003), may not always achieve adequate model fit, at least in offender samples (Neumann et al., 2008). These findings may point to the need to develop factorially "purer" measures of boldness than FD as derived from the PPI or FFM (see, e.g., Hall, 2009; Patrick, 2010). With respect to the latter issue, a few authors (e.g., Gaughan, Miller, Pryor, & Lynam, 2009; Miller & Lynam, in press) have argued that FD and closely related traits are not as central to psychopathy as other authors (e.g., Fowles & Dindo, 2009; Lykken, 1995; Patrick, 2006) have contended. Critics of the FD construct have pointed out that this dimension reflects a more adaptive component of psychopathy than captured by most measures of this construct, such as the PCL-R (e.g., Hare, 2003). Nevertheless, data demonstrating that FD is associated with diminished fear-potentiated startle (Benning, Patrick, Blonigen, Hicks, & Iacono, 2005a), narcissism (Benning, Patrick, & Iacono, 2005b), sensation seeking (Benning, Patrick, & Iacono, 2005b; Lilienfeld & Widows, 2005), substance use disorders (Witt, Donnellan, & Blonigen, 2009), low behavioral inhibition (Uzieblo, Verschuere, & Crombez, 2007), functional (but not dysfunctional) impulsivity (Claes et al., 2009), a dispositional lack of premeditation (Ray, Poythress, Weir, & Rickhelm, 2009), interpersonal manipulativeness (Witt et al., 2009), low emotional empathy (Uzieblo, Verschuere, Van den Bussche, & Crombez, 2010), callous and unemotional traits (Uzieblo et al., 2010), and amorality (Claes et al., 2009) offer compelling support for its construct validity as an indicator of the core affective and interpersonal traits of psychopathy (see Lilienfeld et al., in press). Still, the precise role of FD in psychopathy (e.g., Lykken, 1995) remains unresolved: It may be a necessary but not sufficient feature, or merely one important but associated feature.

#### **Concluding Thoughts and Implications**

Debates regarding the centrality of FD to psychopathy aside, our results point to a heretofore largely neglected constellation of personality traits associated with some domains of psychopathy, namely, those comprising boldness, which is relevant to presidential leadership. As a consequence, they may inform ongoing debates concerning the controversial construct of successful psychopathy (Lilienfeld, 1994). One possibility is that individuals with successful psychopathy possess a predisposition toward disinhibition conjoined with interpersonal and affective traits (e.g., boldness, immunity to anxiety) that buffer them against externalizing behavior (see also Hall & Benning, 2006). This hypothesis warrants investigation in other samples.

Our findings do not address the question of whether the association between boldness and political performance is linear; at extreme levels, boldness may merge into recklessness and become maladaptive. Although subsidiary analyses (not reported here) examining the potential curvilinear effects of FFM-FD (by entering a FFM-FD squared term hierarchically following the FFM-FD linear term) on presidential performance variables yielded consis-

tently negative results, these findings may reflect a curtailment of FD variance at the high end among U.S. presidents.

Finally, our results raise the intriguing but unresearched possibility that the boldness often associated with psychopathy may confer advantages across a host of occupations, vocations, and social roles, such as positions of power and prestige in politics, business, law enforcement, athletics, and the military. If so, they may prove relevant for a better understanding not only of the U.S. presidency but also for occupational performance in fields as diverse as political psychology, industrial/organizational psychology, police psychology, sports psychology, and military psychology. Further investigation of the implications of boldness for leadership in general (see also Atwater & Yammarino, 1993; House & Aditya, 1997), as well as for successful interpersonal behavior more broadly is clearly warranted.

<sup>9</sup> In subsidiary analyses, we examined whether controlling statistically for either duration in office or recency of presidency eliminated the statistically significant associations between FFM-FD and presidential performance. Controlling for duration in office (again, coded as number of days served) reduced the associations between FFM-FD and overall presidential performance to either nonsignificance (in the case of the Siena Poll,  $\chi^2 = 1.07$ , p = .30; in the case of the *Times of London* poll,  $\chi^2 =$ 1.26, p = .261) or marginal significance (in the case of the C-SPAN poll,  $\chi^2 = 3.03$ , p = .083; in the case of the Simonton 12 survey greatness composite,  $\chi^2 = 2.90$ , p = .089). It should be noted, however, that these analyses are extremely conservative statistically given that duration in office is itself highly correlated with total scores on all four presidential polls (rs ranged from .61 to .65, all ps < .001) and with the Simonton 12 survey greatness composite (r = .62, p < .001; see Simonton, 1987, for similar evidence). Yet even after controlling for duration in office, a number of associations between FFM-FD and specific dimensions of presidential performance remained significant, including C-SPAN Public Persuasiveness ( $\chi^2 = 6.58$ , p = .01), C-SPAN Agenda Setting ( $\chi^2 = 4.71$ , p = .03), C-SPAN Congressional Relations ( $\chi^2 = 4.26$ , p = .039), Siena College Leadership Ability ( $\chi^2 = 4.72$ , p = .03), Siena College Party Leadership ( $\chi^2 = 4.19$ , p = .041), Siena College Willingness to Take Risks  $(\chi^2 = 4.23, p = .04)$ , and USPC Domestic Leadership  $(\chi^2 = 4.87, p =$ .027). Controlling for recency of presidency did not eliminate any of previously reported significant associations between FFM-FD and either overall or specific presidential performance.

# References

American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders (4th ed., text rev.). Washington, DC: Author.

Anderson, C. A., & Anderson, K. B. (1996). Violent crime rate studies in philosophical context: A destructive testing approach to heat and southern culture of violence effects. *Journal of Personality and Social Psychology*, 70, 740–756. doi:10.1037/0022-3514.70.4.740

Anderson, D. F. (1973). William Howard Taft: A conservative's conception of the presidency. Ithaca, NY: Cornell University Press.

Ashton, M. C., & Lee, K. (2007). Empirical, theoretical, and practical advantages of the HEXACO model of personality structure. *Personality and Social Psychology Review*, 11, 150–166. doi:10.1177/1088868306294907

Atwater, L. E., & Yammarino, F. J. (1993). Personal attributes as predictors of superiors' and subordinates' perceptions of military academy leadership. *Human Relations*, 46, 645–668. doi:10.1177/001872679304600504

Babiak, P., & Hare, R. D. (2006). Snakes in suits: When psychopaths go to work. New York, NY: ReganBooks.

- Babiak, P., Neumann, C. S., & Hare, R. D. (2010). Corporate psychopathy: Talking the walk. *Behavioral Sciences and the Law*, 28, 174–193.
- Barber, J. D. (1977). *The presidential character* (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.
- Benning, S. D., Patrick, C. J., Blonigen, D. M., Hicks, B. M., & Iacono, W. G. (2005). Estimating facets of psychopathy from normal personality traits: A step toward community epidemiological investigations. Assessment, 12, 3–18. doi:10.1177/1073191104271223
- Benning, S. D., Patrick, C. J., Hicks, B. M., Blonigen, D. M., & Krueger, R. F. (2003). Factor structure of the Psychopathic Personality Inventory: Validity and implications for clinical assessment. *Psychological Assessment*, 15, 340–350. doi:10.1037/1040-3590.15.3.340
- Benning, S. D., Patrick, C. J., & Iacono, W. G. (2005). Psychopathy, startle blink modulation, and electrodermal reactivity in twin men. *Psychophysiology*, 42, 753–762. doi:10.1111/j.1469-8986.2005.00353.x
- Block, J. (1995). A contrarian view of the five-factor approach to personality description. *Psychological Bulletin*, 117, 187–215. doi:10.1037/0033-2909.117.2.187
- Boddy, C. R. (2006). The dark side of management decisions: Organizational psychopaths. *Management Decision*, 44, 1461–1475. doi:10.1108/00251740610715759
- Claes, L., Vertommen, S., Soenens, B., Eyskens, A., Rens, E., & Vertommen, H. (2009). Validation of the Psychopathic Personality Inventory among psychiatric inpatients: Sociodemographic, cognitive, and personality correlates. *Journal of Personality Disorders*, 23, 477–493. doi: 10.1521/pedi.2009.23.5.477
- Cleckley, H. (1988). The mask of sanity. St. Louis, MO: Mosby. (Original work published 1941)
- Cooke, D. J., & Michie, C. (2001). Refining the construct of psychopathy: Towards a hierarchical model. *Psychological Assessment*, 13, 171–188. doi:10.1037/1040-3590.13.2.171
- Costa, P. T., & McCrae, R. R. (1992). NEO PI-R professional manual. Odessa, FL: Psychological Assessment Resources.
- Costa, P. T., & McCrae, R. R. (2000). NEO PI-R professional manual (updated). Odessa, FL: Psychological Assessment Resources.
- Derefinko, K. J., & Lynam, D. R. (2006). Convergence and divergence among self-report psychopathy measures: A personality-based approach. *Journal of Personality Disorders*, 20, 261–280. doi:10.1521/ pedi.2006.20.3.261
- Douglas, K. S., Lilienfeld, S. O., Skeem, J. L., Poythress, N. G., Edens, J. F., & Patrick, C. J. (2008). Relation of antisocial and psychopathic traits to suicide-related behavior among offenders. *Law and Human Behavior*, 32, 511–525. doi:10.1007/s10979-007-9122-8
- Edens, J. F., Marcus, D. K., Lilienfeld, S. O., & Poythress, N. G. (2006). Psychopathic, not psychopath: Taxometric evidence for the dimensional structure of psychopathy. *Journal of Abnormal Psychology*, 115, 131– 144. doi:10.1037/0021-843X.115.1.131
- Fowles, D. C., & Dindo, L. (2009). Temperament and psychopathy: A dual-pathway model. *Current Directions in Psychological Science*, 18, 179–193. doi:10.1111/j.1467-8721.2009.01632.x
- Gaughan, E. T., Miller, J. D., Pryor, L. R., & Lynam, D. R. (2009).
  Comparing two alternative measures of general personality in the assessment of psychopathy: A test of the NEO-PI-R and the MPQ. *Journal of Personality*, 77, 965–996. doi:10.1111/j.1467-6494.2009.00571.x
- Gough, H. G., & Heilbrun, A. B. (1965). The Adjective Check List Manual. Palo Alto, CA: Consulting Psychologists Press.
- Hall, J. R. (2009). Interview assessment of boldness: Construct validity and empirical links to psychopathy and fearlessness (Doctoral dissertation). University of Minnesota, Minneapolis.
- Hall, J. R., & Benning, S. D. (2006). The "successful" psychopath: Adaptive and subclinical manifestations of psychopathy in the general population. In C. J. Patrick (Ed.), *Handbook of psychopathy* (pp. 459–478). New York, NY: Guilford Press.

- Hare, R. D. (2003). Manual for the Revised Psychopathy Checklist (2nd ed.). Toronto, Ontario, Canada: Multi-Health Systems.
- Hare, R. D., Harpur, T. J., & Hemphill, J. F. (1989). Scoring pamphlet for the report psychopathy scale: SRP-II (Unpublished document). Simon Fraser University, Vancouver, Canada.
- Harpur, T. J., Hare, R. D., & Hakstian, R. (1989). A two-factor conceptualization of psychopathy: Construct validity and implications for assessment. Psychological Assessment: A Journal of Consulting and Clinical Psychology, 1, 6–17.
- Heinze, P., Allen, R., Magai, C., & Ritzler, B. (2010). "Let's get down to business": A validation study of the Psychopathic Personality Inventory among a sample of MBA students. *Journal of Personality Disorders*, 24, 487–498. doi:10.1521/pedi.2010.24.4.487
- Hogan, R., Raskin, R., & Fazzini, D. (1990). The dark side of charisma. In
  K. Clark & M. Clark (Eds.), *Measures of leadership* (pp. 343–354).
  West Orange, NJ: Leadership Library of America.
- House, R. J., & Aditya, R. N. (1997). The social scientific study of leadership: Quo vadis? *Journal of Management*, 23, 409–473. doi: 10.1177/014920639702300306
- Institute for the Study of the Americas. (2011). *United States Presidency Centre UK Survey of U. S. Presidents*. London, England: University of London. Retrieved from http://americas.sas.ac.uk/research/survey/index.html
- Ishakawa, S. S., Raine, A., Lencz, T., Bihrle, S., & Lacasse, L. (2001).
  Autonomic stress reactivity and executive functions in successful and unsuccessful criminal psychopaths from the community. *Journal of Abnormal Psychology*, 110, 423–432. doi:10.1037/0021-843X.110.3.423
- Jackson, J. E. (2008). Endogeneity and structural equation estimation in political science. In J. M. Steffensmeier (Ed.), *The Oxford handbook of* political methodology (pp. 404–431). New York, NY: Oxford University Press. doi:10.1093/oxfordhb/9780199286546.003.0017
- Kenney, P. J., & Rice, T. W. (1988). The contextual determinants of presidential greatness. *Presidential Studies Quarterly*, 18, 161–169.
- Kenrick, D. T., & Funder, D. C. (1988). Profiting from controversy: Lessons from the person–situation debate. *American Psychologist*, 43, 23–34. doi:10.1037/0003-066X.43.1.23
- Lilienfeld, S. O. (1994). Conceptual problems in the assessment of psychopathy. Clinical Psychology Review, 14, 17–38. doi:10.1016/0272-7358(94)90046-9
- Lilienfeld, S. O. (1998). Methodological advances and developments in the assessment of psychopathy. *Behaviour Research and Therapy*, 36, 99– 125. doi:10.1016/S0005-7967(97)10021-3
- Lilienfeld, S. O., & Andrews, B. P. (1996). Development and preliminary validation of a self-report measure of psychopathic personality traits in noncriminal population. *Journal of Personality Assessment*, 66, 488– 524. doi:10.1207/s15327752jpa6603\_3
- Lilienfeld, S. O., & Fowler, K. A. (2006). The self-report assessment of psychopathy: Problems, pitfalls, and promises. In C. J. Patrick (Ed.), *Handbook of psychopathy* (pp. 107–132). New York, NY: Guilford Press.
- Lilienfeld, S. O., Patrick, C. J., Benning, S. D., Berg, J., Sellbom, M., & Edens, J. F. (in press). The role of fearless dominance in psychopathy: Controversies, confusions, and clarifications. *Personality Disorders: Theory, Practice, and Research.*
- Lilienfeld, S. O., & Widows, M. R. (2005). The Psychopathic Personality Inventory-Revised (PPI-R): Professional manual. Lutz, FL: Psychological Assessment Resources.
- Lobaczweski, A. M. (2007). Political ponerology: A science on the nature of evil adjusted for political purposes. Grande Prairie, Alberta, Canada: Red Hill Press.
- Loevinger, J. (1994). Has psychology lost its conscience? *Journal of Personality Assessment*, 62, 2–8. doi:10.1207/s15327752jpa6201\_1

- Lykken, D. T. (1982). Fearlessness: Its carefree charm and deadly risks. Psychology Today, 16, 20–28.
- Lykken, D. T. (1995). The antisocial personalities. Hillsdale, NJ: Erlbaum. Lynam, D. T., & Widiger, T. A. (2001). Using the five-factor model to represent the DSM–IV personality disorders: An expert consensus approach. Journal of Abnormal Psychology, 110, 401–412. doi:10.1037/ 0021-843X.110.3.401
- Malterer, M. B., Lilienfeld, S. O., Neumann, C. S., & Newman, J. P. (2010). Concurrent validity of the Psychopathic Personality Inventory with offender and community samples. *Assessment*, 17, 3–15. doi: 10.1177/1073191109349743
- Meehl, P. E. (1971). High school yearbooks: A reply to Schwarz. *Journal of Abnormal Psychology*, 77, 143–148. doi:10.1037/h0030750
- Miller, J. D., & Lynam, D. R. (2003). Psychopathy and the five-factor model of personality: A replication and extension. *Journal of Person*ality Assessment, 81, 168–178. doi:10.1207/S15327752JPA8102\_08
- Miller, J. D., & Lynam, D. R. (in press). An examination of the Psychopathic Personality Inventory's nomological network: A meta-analytic review. *Personality Disorders: Theory, Research, and Practice*.
- Miller, J. D., Lyman, D. R., Widiger, T. A., & Leukefeld, C. (2001).
  Personality disorders as extreme variants of common personality dimensions: Can the Five Factor Model adequately represent psychopathy?
  Journal of Personality, 69, 253–276. doi:10.1111/1467-6494.00144
- Mullins-Sweatt, S. N., Glover, N. G., Derefinko, K. J., Miller, J. D., & Widiger, T. A. (2010). The search for the successful psychopath. *Journal of Research in Personality*, 44, 554–558. doi:10.1016/j.jrp.2010.05.010
- Murray, R. K., & Blessing, T. H. (1983). The presidential performance study: A progress report. *Journal of American History*, 70, 535–555. doi:10.2307/1903482
- Neumann, C. S., Malterer, M. B., & Newman, J. P. (2008). Factor structure of the Psychopathic Personality Inventory (PPI): Findings from a large incarcerated sample. *Psychological Assessment*, 20, 169–174. doi: 10.1037/1040-3590.20.2.169
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 128, 3–72. doi:10.1037/ 0033-2909.128.1.3
- Patrick, C. J. (2006). Back to the future: Cleckley as a guide to the next generation of psychopathy research. In C. J. Patrick (Ed.), *Handbook of psychopathy* (pp. 605–617). New York, NY: Guilford Press.
- Patrick, C. J. (2010). Operationalizing the triarchic conceptualization of psychopathy: Description of brief scales for assessment of boldness, meanness, and disinhibition (Unpublished manual). Retrieved from https://www.phenxtoolkit.org/toolkit\_content/supplemental\_info/psychiatric/measures/Triarchic\_Psychopathy\_Measure\_Manual.pdf
- Patrick, C. J., Edens, J. F., Poythress, N. G., Lilienfeld, S. O., & Benning, S. D. (2006). Construct validity of the Psychopathic Personality Inventory two-factor model with offenders. *Psychological Assessment*, 18, 204–208. doi:10.1037/1040-3590.18.2.204
- Patrick, C. J., Fowles, D. C., & Krueger, R. F. (2009). Triarchic conceptualization of psychopathy: Developmental origins of disinhibition, boldness, and meanness. *Development and Psychopathology*, 21, 913–938. doi:10.1017/S0954579409000492
- Perkins, W. B. (2003). The political nature of presidential impeachments in the United States. In J. C. Baumgartner & N. Kada (Eds.), *Checking executive power* (pp. 21–44). Westport, CT: Praeger.
- Porter, S., & Woodworth, M. (2006). Psychopathy and aggression. In C. J. Patrick (Ed.), *Handbook of psychopathy* (pp. 481–494). New York, NY: Guilford Press.
- Ray, J. V., Poythress, N. G., Weir, J. M., & Rickelm, A. (2009). Relationships between psychopathy and impulsivity in the domain of selfreported personality features. *Personality and Individual Differences*, 46, 83–87. doi:10.1016/j.paid.2008.09.005

- Rosenthal, R. (1991). Meta-analytic procedures for social research. Newbury Park, CA: Sage.
- Ross, S. R., Benning, S. D., Patrick, C. J., Thompson, A., & Thurston, A. (2009). Factors of the Psychopathic Personality Inventory: Criterionrelated validity and relationship to the BIS/BAS and five-factor models of personality. Assessment, 16, 71–87. doi:10.1177/1073191108322207
- Rubenzer, S. J., & Faschingbauer, T. J. (2004). Personality, character, and leadership in the White House: Psychologists assess the presidents. Dulles, VA: Potomac Books.
- Rubenzer, S. J., Faschingbauer, T. J., & Ones, D. S. (2000). Assessing the U.S. presidents using the Revised NEO Personality Inventory. Assessment, 7, 403–419. doi:10.1177/107319110000700408
- Salekin, R., Rogers, R., & Sewell, K. (1996). A review and meta-analysis of the Psychopathy Checklist and Psychopathy Checklist-Revised: Predictive validity of dangerousness. *Clinical Psychology: Science and Practice*, 3, 203–215. doi:10.1111/j.1468-2850.1996.tb00071.x
- Simonton, D. K. (1986). Presidential personality: Biographical use of the Gough Adjective Check List. *Journal of Personality and Social Psychology*, 51, 149–160. doi:10.1037/0022-3514.51.1.149
- Simonton, D. K. (1987). Why presidents succeed: A political psychology of leadership. New Haven, CT:Yale University Press.
- Simonton, D. K. (1988). Presidential style: Personality, biography, and performance. *Journal of Personality and Social Psychology*, 55, 928– 936. doi:10.1037/0022-3514.55.6.928
- Simonton, D. K. (1994). Greatness: Who makes history and why. New York, NY: Guilford Press.
- Simonton, D. K. (2004). Does character count in the Oval Office? Psyc-CRITIQUES, 49(Suppl. 6). doi:10.1037/041107
- Simonton, D. K. (2006). Presidential IQ, openness, intellectual brilliance, and leadership: Estimates and correlations for 42 US chief executives. *Political Psychology*, 27, 511–526. doi:10.1111/j.1467-9221.2006.00524.x
- Simonton, D. K. (2008). Presidential greatness and its socio-psychological significance: Individual or situation? Performance or attribution? In C. Hoyt, G. R. Goethals, & D. Forsyth (Eds.), Leadership at the crossroads: Vol. 1. Psychology and leadership (pp. 132–148). Westport, CT: Praeger.
- Steel, R. (2010, April 21). Theodore Roosevelt, empire builder. Retreived from http://www.nytimes.com/2010/04/25/books/review/Steel-t.html
- The Times of London. (2008). Who is the greatest? The Times U.S. Presidential rankings. Retrieved from http://www.timesonline.co.uk/tol/news/world/us\_and\_americas/us\_elections/article5030539.ece
- Uzieblo, K., Verschuere, B., & Crombez, G. (2007). The Psychopathic Personality Inventory: Construct validity of the two-factor structure. Personality and Individual Differences, 43, 657–667. doi:10.1016/j.paid.2007.01.008
- Uzieblo, K., Verschuere, B., Van den Bussche, E., & Crombez, G. (2010).
  The validity of the Psychopathic Personality Inventory-Revised in a community sample. Assessment, 17, 334–346. doi:10.1177/1073191109356544
- Widiger, T. A., & Lynam, D. R. (1998). Psychopathy as a variant of common personality traits: Implications for diagnosis, etiology, and pathology. In T. Millon, E. Simonson, M. Birket-Smith, & R. D. Davis (Eds.), Psychopathy: Antisocial, criminal, and violent behavior (pp. 171–187). New York, NY: Guilford Press.
- Widom, C. S. (1977). A methodology for studying noninstitutionalized psychopaths. *Journal of Consulting and Clinical Psychology*, 45, 674– 683. doi:10.1037/0022-006X.45.4.674
- Williams, K. M., Nathanson, C., & Paulhus, D. L. (2010). Identifying and profiling scholastic cheaters: Their personality, cognitive ability, and motivation. *Journal of Experimental Psychology: Applied*, 16, 293–307. doi:10.1037/a0020773
- Winter, D. G. (1973). The power motive. New York, NY: Free Press.

- Winter, D. G. (1983). Development of an integrated system for scoring motives in verbal running text. Unpublished manuscript, Wesleyan University.
- Winter, D. G. (1987). Leader appeal, leader performance, and the motive profiles of leaders and followers: A study of American presidents and elections. *Journal of Personality and Social Psychology*, 52, 196–202. doi:10.1037/0022-3514.52.1.196
- Winter, D. G. (2005). Things I've learned about personality by studying leaders at a distance. *Journal of Personality*, 73, 557–584. doi:10.1111/j.1467-6494.2005.00321.x
- Witt, E. A., Donnellan, M. B., & Blonigen, D. M. (2009). Using existing self-report inventories to measure the psychopathic personality traits of fearless dominance and impulsive antisociality. *Journal of Research in Personality*, 43, 1006–1016. doi:10.1016/j.jrp.2009.06.010

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# Retraction of Stapel and van der Linde (2011)

The following article from the July 2011 issue is being retracted: Stapel, D. A., & van der Linde, L. A. J. G. (2011). What drives self-affirmation effects? On the importance of differentiating value affirmation and attribute affirmation. *Journal of Personality and Social Psychology, 101,* 34–45. doi:10.1037/a0023172

This retraction follows the results of an investigation into the work of Diederik A. Stapel (further information on the investigation can be found here: https://www.commissielevelt.nl/). The Levelt Committee has determined data supplied by Diederik A. Stapel to be fraudulent. His co-author was unaware of his actions and was not involved in the collection of the fraudulent data.

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