Personality and Charisma in the U.S. Presidency: A Psychological Theory of Leader Effectiveness

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We argue in this paper that in an age of complexity, change, large enterprises, and nation states, leaders are more important than ever. However, their effectiveness depends on their personality and charisma and not solely on their control over bureaucratic structures. We used a study of U.S. presidents to test a general model of leader effectiveness that includes leader personality characteristics, charisma, crises, age of the institution headed by the leader, and leader effectiveness. Age of the presidency accounted for approximately 20 percent of the variance in presidential needs for power, achievement, and affiliation. Presidential needs and a measure of leader self-restraint in using power, the age of the presidency, and crises accounted for 24 percent of the variance in presidential charisma. Age of the presidency, crises, needs, and charisma together predicted from 25 percent to 66 percent of the variance in five measures of presidential performance. Our study demonstrates that personality and charisma do make a difference.•

Traditional leadership theories and research have focused almost exclusively on the effects of leaders on followers' cognition (Evans, 1970; House, 1971; Wofford and Srinivasan, 1983), leader reinforcement behaviors (Ashour, 1982; Podsakoff, Todor, and Skov, 1982), leader and follower exchange relationships (Graen and Cashman, 1975), and the processes by which leaders accumulate "idiosyncratic credit" that can be used subsequently as "units of exchange" to influence followers (Hollander, 1964). Traditional leadership theory thus focuses on leader control over such aspects of the followers' environment as rewards and punishments, job characteristics, authority relations, resources, training, and followers' perceptions of their environment.

Since the mid 1970s, however, a new genre of leadership theory has emerged (e.g., House, 1977; Burns, 1978; Bass, 1985; Bennis and Nanus, 1985, Tichy and Devanna, 1986; Kuhnert and Lewis, 1987; Conger and Kanungo, 1988; Sashkin, 1988). All of these new theories invoke inspirational, visionary, and symbolic behavior—behavior described by Weber (1947) as charismatic. In this new genre of theory, which we refer to as charismatic leadership theory, attention has been shifted to exceptional leaders who have extraordinary effects on their followers and eventually on social systems. It is the argument of this new genre of leadership theory that such charismatic leaders affect followers in ways that are quantitatively greater and qualitatively different than the effects specified by past leadership theories. Charismatic leaders transform the needs, values, preferences, and aspirations of followers. These leaders motivate followers to make significant personal sacrifices in the interest of some mission and to perform above and beyond the call of duty. Followers become less motivated by self-interest and more motivated to serve the interests of the larger collective. The new theories that describe charismatic leadership focus on the emotional attachment of followers to the leader; the emotional and motivational arousal of followers,

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identification with the mission articulated by the leader; followers' self-esteem, trust, and confidence in the leader; values that are of major importance to followers; and followers' intrinsic motivation.

As of our last count, at least twenty empirical investigations of the charismatic phenomenon had been conducted. These studies relied on a variety of research methods, including two case studies (Roberts, 1985; Roberts and Bradley, 1988), two longitudinal observational studies (Trice and Beyer, 1986), numerous field surveys (for examples, see Smith, 1982; Yukl and Van Fleet, 1982; Hater and Bass, 1988; Podsakoff et al., 1990), an analysis of behavior in a management game (Avolio, Waldman, and Einstein, 1988), two rigorous laboratory experiments (Howell and Frost, 1989, Puffer, 1990), an interpretative analysis of interviews (Bennis and Nanus, 1985), and a rigorous content analysis of interviews (Howell and Higgins, 1990). Further, these studies were conducted across a wide variety of samples, including students who served as laboratory subjects (Howell and Frost, 1989, Puffer, 1990), military combat and noncombat leaders (Yukl and Van Fleet, 1982), middle- and lower-level managers (e.g., Hater and Bass, 1988), world-class leaders (Bass, Avolio, and Goodheim, 1987), educational leaders (Roberts, 1985), Asian Indian middle managers (Pereira, 1987), top-level corporate leaders (Bennis and Nanus, 1985), presidents of alcoholic rehabilitation organizations (Trice and Beyer, 1986), and emergent informal champions of innovations (Howell and Higgins, 1990). It is safe to conclude that these empirical studies provide support for charismatic leadership theory in a wide range of populations using a wide variety of research methods.

At the same time that organizational behaviorists and sociologists were pursuing their inquiries into charismatic, transformational, and moral leadership, McClelland, Atkinson, and their associates were studying the motivational bases of human behavior. This program of research included conceptual and empirical work on individual motives, such as the needs for achievement, power, affiliation (close relationships with others), and activity inhibition (an individual's use of power to achieve institutional or social goals rather than personal goals) and methods of measuring these individual characteristics (McClelland, 1985a, 1985b). This program of research also resulted in the development of a number of sophisticated theories of motivation (McClelland, 1985a, 1985b). Over the last two decades McClelland and his associates have demonstrated in a wide variety of organizational settings that leader motives such as needs for power, affiliation, and activity inhibition predict leader effectiveness.

Although traditional leadership theory still has value for understanding leaders in more direct-supervisory situations, we believe charismatic leadership theory can be an additional tool for understanding leaders such as those who head large enterprises or nation states, who cannot maintain direct relationships with their followers and who must lead by inspiration rather than by controlling the followers' environment. We have thus created a model of leadership that combines elements from work on the motivational

bases of effective leadership developed by McClelland (1985a, 1985b) with elements of recent work on charismatic leadership that also focuses on effectiveness. We tested the model in a study of all the elected U.S. presidents, in which we measured charisma, to examine if it is charismatic leadership that affects whether history and contemporaries judge a president to be effective.

Charisma

Charisma refers to the ability of a leader to exercise diffuse and intense influence over the beliefs, values, behavior, and performance of others through his or her own behavior, beliefs, and personal example. Bradley (1987) defined three types of charisma: charisma as a personality characteristic, charisma as a relationship between leader and followers, and charisma as a social structure. We define charisma here as a relationship or bond between a leader and subordinates or other followers, and although we do not define charisma as a personality trait of specific leaders, we argue that certain leader personality characteristics contribute to the formation of a charismatic relationship with subordinates. Because charisma is a relationship and not a personality characteristic of leaders, charisma exists only if followers say it does or followers behave in specific ways. Wilson (1975: 7) provided an example:

> If man runs naked down the street proclaiming that he alone can save others from impending doom, and if he immediately wins a following, then he is a charismatic leader. A social relationship has come into being. If he does not win a following, he is simply a lunatic.

Further, the charismatic relationship consists of specific types of follower responses. These include performance beyond expectations (Bass, 1985); changes in the fundamental values and beliefs of followers (Etzioni, 1975: 305); devotion, loyalty, and reverence toward the leader (House, 1977); a sense of excitement and enthusiasm (Weber, 1946: 52; Bass, 1985); and a willingness on the part of subordinates to sacrifice their own personal interests for the sake of a collective goal (House, 1977; Bass, 1985).

In our study of the U.S. presidents, we define the charismatic relationship in terms of the actual behavior and personal example of the leader or the attributions of behavior made to the leader by subordinates Weber (1946: 52–53) distinguished two types of charisma: pure charisma, or charisma resulting from the behavior of the leader, and routinized charisma, arising from occupying a formal or hereditary position. Etzioni (1975: 306) pointed out that pure charisma is acquired through achievement and has to be achieved over and over again by the leader. Our study focused on pure charisma, and we refer to it as "behavioral charisma" because it is based on the actual or presumed behavior of the leader.

Motives, Behavioral Charisma, and Leader Performance

Motives and performance. Over several decades, McClelland, Atkinson, and their colleagues have studied the nature, sources, and effects of needs such as the need for achievement, need for affiliation (close relationships with

others), need for power, and activity inhibition (an individual's use of power to achieve institutional rather than personal goals). One result of this continuing stream of research has been the proposition that a certain personality profile, labelled the leadership motive profile, is related to effective leadership. Specifically, the effective leader is more likely to have a high need for power, high activity inhibition, and a lower need for affiliation than the ineffective leader (Cummin, 1967, Varga, 1975; McClelland and Burnham, 1976; Winter, 1978; McClelland and Boyatzis, 1982). Furthermore, two empirical studies have indicated that this relationship between the leadership motive profile and leader effectiveness is more likely to be found at higher levels of an organization and in generalist rather than technical jobs (Winter, 1978; McClelland and Boyatzis, 1982).

Power. Individuals who are high on the need for power, as measured by a content analysis of Thematic Apperception Test stories or running text, exhibit a concern with strong, vigorous action that affects others, action that has an emotional impact on others, and reputation and status (Winter, 1973: 251–255). Management and political positions offer numerous opportunities to influence others, have an emotional impact on them, and provide status and reputation to incumbents. Further, an essential component of successful performance in a management or political position is the motivation, control, and coordination of others for some organizational or social objective. Theoretically, the acquisition and exercise of power reinforces the behavior of those who are high on the need for power, and, therefore, there should be positive associations between need for power and the pursuit of management/political positions, level attained in organizations and society, and success in such positions.

Activity inhibition. Activity inhibition is defined as the extent to which an individual uses available power to achieve institutional or social goals rather than purely personal goals. One might expect a positive relationship between activity inhibition and leader performance because, by definition, individuals with a social orientation have a concern for the goals of the organization or group and not just personal goals.

Affiliation. Individuals who are high on the need for affiliation tend to be concerned with establishing, maintaining, and restoring close personal, emotional relationships with others (Heyns, Veroff, and Atkinson, 1958). McClelland and Boyatzis (1982) argued, in essence, that there should be a negative relationship between need for affiliation and leader performance. The leader who is low on need for affiliation can make decisions on the basis of organizational necessity. A leader who is high on need for affiliation will be concerned about his or her personal relationships with others and will make decisions on the basis of favoritism, to the detriment of organizational requirements.

Achievement. Need for achievement may be defined as a concern for long-term involvement, competition against some standard of excellence, and unique accomplishment (McClelland et al., 1958). Above all, need for achievement

characterizes individuals who are motivated or driven by a need for personal accomplishment through their own efforts. In nontechnical management positions and at higher levels in organizations, and particularly in politics, where technical requirements are few and impact on others is fundamental, effectiveness depends on the extent to which the leader motivates and coordinates others. A leader at a high level who attempts to do everything personally may be doomed to failure both because there is too much for a single person to do and because he or she underutilizes the capacity of subordinates and superiors. Therefore, in our study of the presidents, we expect a negative relationship between need for achievement and performance.

Motives and behavioral charisma. House's (1977) theory of charismatic leadership suggested a link between need for power as defined by McClelland and colleagues (e.g., McClelland and Burnham, 1976) and behavioral charisma. According to House, one motive that differentiates charismatic leaders from others is an unusually high need for influence or power, because without such a need, they are unlikely to have developed the necessary persuasive skills to influence others and they are also unlikely to obtain satisfaction from the leadership role. There may be a negative relationship between need for achievement and behavioral charisma. The work of Bass (1985), House (1977), and others suggests that charismatic leaders arouse others to perform beyond expectations. Need for achievement, which motivates personal action rather than action directed at, for, and with others, could be viewed as a liability rather than an asset for charismatic leaders. According to Bass, charismatic leaders have an ability to understand and build on the needs, values, and hopes of their followers. They conceive and articulate visions and goals that motivate their followers toward collective action rather than self-interest. Thus, charismatic leaders generally use their power for the good of the collective rather than their personal good, although Bass (1985) noted exceptions. Therefore, we would expect a positive relationship between activity inhibition, defined as the tendency to use available power for social and institutional rather than personal goals, and behavioral charisma. Bass (1985) noted that as a consequence of self-confidence and strong beliefs about what is right, charismatics can reprimand or replace their subordinates more easily than others. Loyal and trusted followers of a charismatic revolutionary sometimes find themselves demoted, replaced, exiled, or executed once their leader has attained power. Low need for affiliation is one explanation of this ability of charismatic leaders to deal harshly with their subordinates, and therefore, there may be a negative relationship between need for affiliation and behavioral charisma.

For our study of U.S presidents, we therefore hypothesize from the above discussion.

Hypothesis 1: Presidential behavioral charisma will be positively related to presidential need for power and presidential activity inhibition and negatively related to presidential needs for achievement and affiliation.

Behavioral charisma and leader performance. McClelland (1985a) outlined a general theory of behavior that may be used to explain how charismatic leaders affect followers' beliefs and performance. Behavior is an interactive function of three sets of variables. The first set includes motives such as needs for power, achievement, and affiliation. These motives are nonconscious needs that tend to vary from individual to individual and tend to vary in strength within a given person as arousing cues in the environment fluctuate over time. The second set of variables is values, namely, the values or worth that individuals attach to specific activities. These are consciously held and are unrelated to motives. For example, two individuals may have a high need for affiliation but they may value different kinds of activities to meet this need. The third set of variables in McClelland's theory is beliefs, which includes beliefs about the probability that effort leads to performance and perceptions of links between performance and outcomes.

The effects of charismatic leader behavior on followers may be explained in terms of these three sets of concepts. Leaders may attract subordinates who are high on one or more motives. Further, leaders arouse the motives of their followers. For example, Gandhi's appeals to love and acceptance perhaps aroused the affiliation motive of his followers. Military leaders arouse the power motive of subordinates going into battle, and leaders of research teams appeal to the achievement motive of their subordinates (House, 1977). Second, the organizational and sociological literature has stressed the role of charismatic leaders in shaping and changing the basic values of followers. Because of the behavior, personal example, and vision of charismatic leaders, followers acquire new and powerful values that guide their actions. Third, charismatic leaders show confidence in their subordinates and project self-confidence. As a result, followers' beliefs about their ability to perform increase. From the perspective of McClelland's (1985a) general theory of behavior, charismatic leaders may have extraordinary effects on their followers by arousing mission-relevant motives, changing their basic beliefs, and increasing their self-confidence. As a result of these affective and normative effects on followers, charismatic leaders produce in followers extraordinary performance as well as strong commitment to the leader and his or her mission. By motivating their followers to extraordinary efforts and performance, charismatic leaders may enhance their own effectiveness.

From the above discussion, we derive two hypotheses for our study of the U.S. presidents:

Hypothesis 2: Presidential behavioral charisma will be positively related to presidential performance. This relationship will remain after controlling for the effects of presidential motives on overall performance and on presidential behavioral charisma.

Hypothesis 3: There will be positive relationships between presidential performance and need for power and activity inhibition, and there will be negative relationships between presidential performance and needs for achievement and affiliation, independent of any effects of motives on performance via behavioral charisma.

Four Alternative Models

Tests of the three basic hypotheses were complicated by the fact that at least four alternative explanations of our empirical data were conceivable. In testing the basic hypotheses, we took a number of steps to reduce the plausibility of these alternative explanations.

Crises and the institutional age of the presidency. To test the three hypotheses, it was necessary to control for two potentially confounding effects, namely crises and the institutional age of the presidency, the number of years from the beginning of the American presidency to the midpoint of a president's first term of office. It is possible, for example, that crises are related to both charisma and presidential performance, so that any observed relationship between charisma and performance may be due to the relationship of each to crises. Crises may present the president with an opportunity to take charismatic action, may loosen bureaucratic or organizational constraints on charismatic action, and may lead subordinates to accept or demand charismatic action from the president. Indeed, many scholars (e.g., Weber, 1946; Bass, 1985; Bradley, 1987) have argued that crises are a necessary prerequisite for the emergence of behavioral charisma. Crises may be related to presidential performance in that they may provide the president with opportunities to be effective. In order to control for the effect of crises, we also tested the following hypothesis with our data on the U.S. presidents:

Hypothesis 4: Crises are positively related to presidential behavioral charisma and presidential performance

Institutional age may be related to both motives and crises. It may be positively related to the motives of presidents in that if the American presidency has grown in power over time, it will have become more attractive to those who have a high need for power. Institutional age may be positively correlated with measures of crises because the world has become a more dangerous place over time, because the American presidency over time has acquired new domestic and foreign responsibilities, and because contemporary historical records used to derive measures of crises may provide more detail on more recent than on earlier crises

Institutional age may also be related to behavioral charisma, for two reasons. First, as Schwartz (1983) pointed out, early American political philosophy did not favor the emergence of charismatic leaders. There was a belief that power corrupts and that unrestrained power leads to tyranny. Therefore, the ideal statesman was one who was self-restrained by "virtue," worked within the system, and was not eager for political office. This ideal was manifested in the tradition that presidential candidates did not personally campaign for office. Rather, they awaited a "call" to service from the people. Over time, this ideal of the restrained statesman weakened, and therefore, over time the value system surrounding the presidency facilitated the emergence of charismatic leaders and behavior. A second trend favoring the increase in presidential behavioral charisma over time has been the development of the mass media. Widely distributed newspapers, then the telegraph, radio, films, and,

lastly, television, have made it increasingly feasible for presidential candidates and presidents to influence subordinates and masses through their actual or presumed charismatic behavior.

Institutional age may be positively related to presidential performance, possibly because historical records provide more detail on more recent presidents than earlier presidents and possibly because the increasing power of the presidency has provided more recent presidents with greater opportunities to be effective.

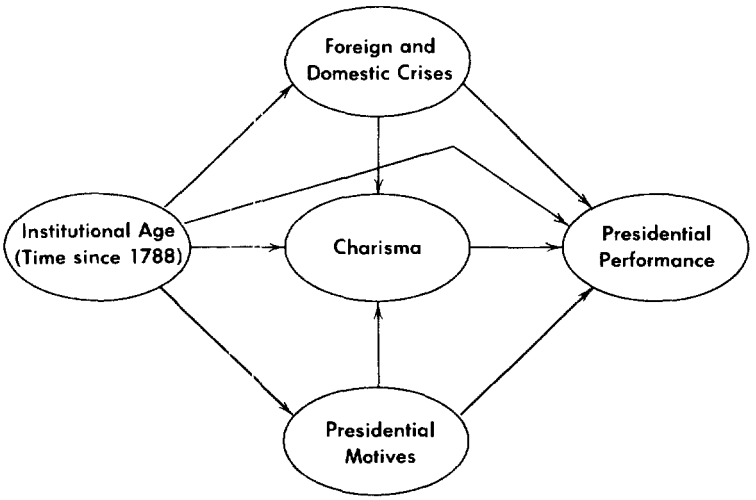
These considerations led to a test of the following hypothesis to control for effects of institutional age that might otherwise invalidate tests of the first three hypotheses:

Hypothesis 5: The institutional age of the presidency is positively related to presidential motives, level of crises within administrations, presidential behavioral charisma, and presidential performance

Hypotheses 4 and 5 were combined with the first three hypotheses into a single causal model relating institutional age of the presidency, presidential motives, crises, presidential behavioral charisma, and presidential performance, represented by Figure 1. In this model, motives and crises increase with the age of the presidency. Presidential charisma will tend to be greater in periods of crisis than in periods of tranquility, will be positively related to presidential need for power and activity inhibition, and will be negatively related to presidential needs for affiliation and achievement. Further, as the presidency has aged as an institution, the charisma of the president has increased. Presidential performance depends on presidential motives, the charismatic relationship between president and subordinates, crises, and the age of the presidency.

Common-method response bias. Common-method response bias may inflate or suppress true relationships among variables hypothesized to be causally related. The

Figure 1. Effects on presidential performance of institutional age, crises, motives, and charisma.



common method may be a single instrument or questionnaire or document used to derive independent and dependent variables, a single rater or set of raters who assess variables, or a single context that generates the data or the coding of the data. Salancik and Pfeffer (1977a) described three cognitive processes—consistency, priming, and the presence of implicit theories of behavior—that might affect relationships among variables measured from a single source such as a questionnaire, and these same processes might compromise the coding of historical materials used in the present investigation. Consistency effects arise when individuals organize information about their attitudes and beliefs so that their attitudes and beliefs do not contradict each other. Two conditions appear to be necessary for consistency effects to arise. First, the individual must remember responses to prior questions. Second, the individual must see that his or her previous responses have some implications for responses to the present question or item. A major source of consistency effects is the presence of some implicit theory of behavior that relates various items to each other. Priming refers to the process whereby the questionnaire items, the instrument used, or the context in which the data is collected orients or focuses the respondent's attention on certain aspects of the situation. As a result, some information becomes more available from memory and salient, and this information, in turn, becomes the basis for the individual's response to a certain item. Once specific information is available in memory about individual items, then consistency effects and implicit theories of behavior may induce spurious correlations among questionnaire items and scales.

To minimize the impact of common-method response bias, we used multiple ratings from multiple sources to measure the majority of the constructs found in the Figure-1 model and multiple sources of data coded by different raters working separately to measure constructs causally related by our model.

The common pool of historical fact and interpretation. Quantitative research that uses historical materials is subject to a particularly serious validity threat. For historical figures such as American presidents, there may be a common and consistent body of fact and interpretation, which we may call the common pool of historical fact and interpretation. According to this interpretation, a given president may be seen as effective and charismatic in this pool, another may be viewed as ineffective and noncharismatic. Biographers and encyclopedists make use of this pool or work derived from it, historians who respond to surveys make use of this pool or make use of materials of other biographers, essayists, and historians who have used this pool. Coders who translate original or derived materials into quantitative scales make use of materials generated by historians and others who have used this common pool. Further, these coders themselves may make use of this common pool of fact and interpretation by coding their materials on the basis of impressions they carry around of important historical figures. The point is that standard methods used to control common-method response bias such as multiple sources

and multiple coders will not solve this problem. All sources and all coders ultimately tap the same single source. It is therefore possible that response bias arising from a common pool of historical fact and interpretation may account for observed relationships among the variables measured in the present study.

To test this possibility, a response-bias model was developed and tested as an alternative to the model in Figure 1. This response-bias model included two latent variables, institutional age, assumed to be measured without error, and a response-bias latent variable representing the common pool of historical fact and interpretation. Each observed measure, excluding institutional age, was defined as a function of this latent variable plus random error of measurement. If a common pool of historical fact and interpretation induced correlations among observed variables, then these correlated observed variables would load significantly on the latent response-bias variable Institutional age and the latent response-bias variables were predicted to be relatec The following hypotheses were tested:

Hypothesis 6: Observed variables other than institutional age will have uniformly high loadings on a latent response-bias factor representing the common pool of historical fact and interpretation from which the observed variables arose.

Hypothesis 7: Institutional age and the latent response-bias factor will be positively related

The reliability and validity of this response-bias model were evaluated using the same criteria that were applied to the substantive model

The attributional perspective. A number of researchers (e.g , Lord et al., 1978; Meindl, Ehrlich, and Dukerich, 1985; Yukl, 1989) have argued that the effects of perceived effectiveness on measured leader characteristics may be explained in terms of implicit leadership theory. According to this interpretation, observers of leaders, including raters who fill out standard questionnaires or respond to interviews, have a theory about leader behavior. They may perceive leader performance tc be an effect of certain leader behavioral styles. If, in a given situation, they have some idea about a leader's performance or effectiveness, they use their implicit leadership theory to infer the behavioral attributes that "logically" led to the perceived performance. Implicit leadership theory thereby explains the experimental results reported by Lord et al. (1978) and others in which manipulation of performance cues affected perceptions of leader characteristics independent of any variation in actual leader behavior

This perspective may be contrasted with the basic claim of the integrated House-McClelland model developed here. We argue that a real social relationship called charisma affects leader performance The attributionists argue that perceptions of leader performance lead to attributions of charisma. It is extraordinarily difficult to disentangle these two opposite effects in a study using nonexperimental techniques. Measures of charisma are likely to come from people who knew the leader, from subsequent biographies and essays, or from surveys of later historians Any positive

relationship between these perceptions of charisma and measures of performance would equally support the substantive as well as the attributional model.

To deal with this difficulty, we conducted two analyses. Our first analysis used measures of charisma that conceivably had been tainted by later historians' and coders' perceptions of presidential performance while in office. We then retested the basic substantive model using a measure of charisma based on materials from the very beginning of each president's term of office. The possibility that these measures had been tainted by subsequent attributions from perceived performance is rather low, because the materials used in the second analysis predate any actual or perceived presidential performance.

METHOD

Subjects

Of 39 American presidents from Washington to Reagan, Tyler, Fillmore, Arthur, A. Johnson, and Ford were not elected to office and therefore were not included in this study. Two, W. H. Harrison and J. Garfield, were elected to office but served less than two years, so they were excluded. Finally, we did not have complete data for Reagan, so he was also eliminated. Therefore, the final sample size is 31 presidents.

Data

The data used were restricted to presidential first terms of office because years in office is related to perceived presidential greatness and presidential performance (Simonton, 1987: 192). By limiting measures to first terms of office we controlled for this effect of time on performance.

Institutional age. Institutional age was the number of years from 1788, the year before Washington's first year in office, to the midpoint of each president's first term of office.

Motives. Measures of presidential affiliation, power, and achievement motives were taken from Winter (1987). Winter presented complete motive data for the 34 presidents, from Washington to Reagan, who were elected to office, which he had derived from a content analysis of presidents' first-term inaugural addresses. He had had the presidential inaugural speeches scored by two trained and reliable scorers (demonstrated category agreement with expert scoring over .85) who discussed and resolved any disagreements that had occurred in scoring the speeches. He used copies of speeches from a single-volume compilation (hence identical in format and typeface), replaced each president's name with a code number, and mixed the speeches together randomly before coding.

While presidential speeches are written in part by speech writers, Winter (1987) argued that images in inaugural speeches represent the thoughts and motives of presidents. Further, Winter and Stewart (1977) demonstrated the construct validity of these motive scores for twentieth-century presidents. Correlations between motive scores were consistently in the range of .60 to .80 with such predicted variables as cabinet-member turnover, presidential

assassination attempts, scandals in presidential administrations, arms limitation agreements, entry into war, and type of individual selected for cabinet membership.

Activity inhibition. To measure activity inhibition, McClelland et al. (1972) merely counted the frequency of "nots" in stories written by subjects in response to a set of TAT (Thematic Apperception Test) pictures. McClelland believed that the historical use of the word "not" in proscriptive statements in the Judeo-Christian tradition, such as "Thou shalt not . . . ," reflects constraint on the coercive, exploitative, and self-interested use of power. While the construct validity of this measure has yet to be established, its predictive validity has been demonstrated in a number of studies (see McClelland, 1985b: chap. 8, for a review). In our study, when we attempted to derive a measure of presidential activity inhibition by counting the number of "nots" appearing in presidential inaugural addresses, we found very little variation in this measure from one inaugural speech to another and very few occurrences of the word "not." Therefore, a measure of activity inhibition was developed for this study that relied on other materials written by or about presidents

Seven coders collected data. Each coder was responsible for finding fifteen items or passages, for a number of presidents, from the following four sources: (1) letters and speeches in collections of letters and speeches written by presidents; (2) letters and speeches in autobiographies, memoirs and diaries written by presidents; (3) autobiographies, memoirs, and diaries written by presidents but without letters and speeches; and (4) biographies by others. Coders first identified available materials for the presidents they had been assigned to code from the library's computerized and hard-copy catalogues. The coders were instructed to select randomly all fifteen or as many items from the first source as possible and then to proceed to the next source if necessary and select as many as possible. The rationale for this approach was that the personal letters and speeches probably provided a better measure of activity inhibition than materials written by others. A passage was defined to be a selection of from one to three pages in length. Passages less than one page were not used unless the coder could not find enough longer passages. Coders randomly selected three pages from passages longer than three pages, such as those from lengthy autobiographies and biographies. In the event that more than one autobiography or biography was available for a given president, the coders were instructed to select passages randomly from all autobiographies and biographies available. Finally, coders selected materials written during the president's first term of office rather than materials written either before or after.

Two coders collected fifteen items for each president, with the result that 30 items were available for each president. Coders also counted the total number of words in each passage and recorded, for each item, rater, source (one of the four sources listed above), and president. For each passage, the number of "nots" was divided by the total number of words in the passage. These raw

activity-inhibition scores were regressed on dummy variables for president, source, and rater. The final activity-inhibition scores used were the regression weights on presidential dummy variables in a regression of the raw activity inhibition scores regressed on president, source, and rater. The regression weights represented activity-inhibition scores independent of sources and rater effects.

Crises. A coding form was developed that listed 13 types of international relations crises (e.g., "hostile diplomatic relations," "declaration of war by the U.S."), 11 categories of domestic and international economic crises (e.g., "bankruptcies, farm and home foreclosures, large private debt burden"; "financial panic"), and 23 categories of domestic unrest (e.g., "rebellions, insurrections, uprisings", "military occupation of U.S. territory by the National Guard, etc."). Eight coders coded these three types of crises from one of two chronological histories (Morris, 1982; Schlesinger, 1983). Each coder read the assigned material and checked off on a coding form each occurrence during specific terms of office all crises in these three categories. Each crisis was weighted 1, except the War with Mexico, Spanish-American War, and Korean War (weighted 2); the War of 1812 and the Vietnam War (weighted 4); World Wars I and II (weighted 6); and the Civil War (weighted 10). These separate scores were aggregated into overall scores that included international relations, economic, and domestic crises. Four overall crises scores (two coders × two sources) were available

Editorial charisma. This measure of charisma was derived from editorials appearing in the *New York Times* on the day after the president's inauguration Editorials on all presidents from Pierce (1853) to Reagan (1981) were coded. No editorials before that for Pierce were available because the *New York Times* did not exist prior to Pierce's term of office. We decided not to consult other newspapers for earlier editorials because earlier newspapers tended to be party organs rather than newspapers in the modern sense.

Names of presidents were removed from the editorials and the editorials were arranged in an order other than the order of presidents to reduce the possibility the coders might guess the identity of each president. Two advanced undergraduate students independently classified each president as charismatic, noncharismatic, or "in-between/can't tell" on the basis of written coding instructions that described nine behavioral characteristics of presidential charisma, such as self-confidence and strong moral and ideological appeals to their followers.

Behavioral charisma. Four measures of presidential behavioral charisma were used. Two of these, *charismatic presidential behavior* and *charismatic presidential effects,* were developed for this study. Two further measures, *presidential charisma* and *presidential creativity,* were taken from Simonton (1986, 1988).

The biographies of two or more cabinet members reporting to each president were content analyzed to provide biography-based measures of objective presidential charismatic behavior and effects on close followers. All

Table 3

Tests of Hypotheses Relating Motives, Charisma, and Performance of American Presidents in Substantive Model

Dependent variable	R^2	Independent variable	Hypothesis No.	Predicted path coefficient	Standardized path coefficient
Presidential charisma	24	Power	1	+	+ 234**
		Achievement	1	−	− 189****
		Affiliation	1	−	− 086
		Activity inh	1	+	+ 237****
		Crises	4	+	+ 282***
		Inst age	5	+	+ 120*
Presidential direct action	66	Charisma	2	+	+ 210****
		Power	3	+	+ 620****
		Achievement	3	−	− 207****
		Affiliation	3	−	− 166
		Activity inh	3	+	+ 266****
		Crises	4	+	+ 378****
		Inst age	5	+	− 239*
Presidential subjective performance	60	Charisma	2	+	+ 468****
		Power	3	+	+ 524****
		Achievement	3	−	− 048
		Affiliation	3	−	− 373****
		Activity inh	3	+	+ 284****
		Crises	4	+	+ 104***
		Inst age	5	+	− 347*
International relations performance	25	Charisma	2	+	− 047
		Power	3	+	+ 361****
		Achievement	3	−	− 344****
		Affiliation	3	−	− 488****
		Activity inh	3	+	+ 394****
		Crises	4	+	+ 024
		Inst age	5	+	+ 182**
Presidential economic performance	38	Charisma	2	+	+ 604****
		Power	3	+	− 193*
		Achievement	3	−	+ 112
		Affiliation	3	−	− 001
		Activity inh	3	+	+ 129
		Crises	4	+	− 102
		Inst age	5	+	+ 070
Presidential social performance	45	Charisma	2	+	+ 306****
		Power	3	+	+ 508****
		Achievement	3	−	− 196***
		Affiliation	3	−	− 583****
		Activity inh	3	+	+ 154**
		Crises	4	+	+ 065*
		Inst age	5	+	+ 068
Power	21	Inst age	5	+	+ 459****
Achievement	24	Inst age	5	+	+ 487****
Affiliation	19	Inst age	5	+	+ 438****
Activity inh	00	Inst age	5	+	− 013
Crises	29	Inst age	5	+	+ 540****

*$p < .05$, **$p < .025$, ***$p < .005$, ****$p < .0005$, one-tailed tests
*$p < .001$, two-tailed test

Test of the Substantive Model Using Editorial Charisma

The basic substantive model diagrammed in Figure 1 was tested a second time using two measures of charisma extracted from editorials appearing in the *New York Times,* rather than the four-measure index of behavioral charisma. Coefficients relating editorial charisma to direct action, international relations performance, economic performance, social performance, and subjective performance were, respectively, .485 ($p < .001$, one-tailed test), .503 ($p < .001$, one-tailed test), − 103 (not significant), −.148 ($p < .025$, two-tailed test), and .347 ($p < .001$, one-tailed test). The sample size for this second test was 21 presidents, not 31

A set of biographical extracts separate from those used to calculate the final presidential scores was used to develop training materials. Two independent experts, individuals knowledgeable about House's (1977) theory, coded these practice passages, discussed their ratings and then came to agreed-upon ratings for the passages. They also developed two training manuals, one for charismatic behavior and one for charismatic effects, that described each aspect of charismatic behavior or effects and gave examples of each. Sixteen undergraduate students were recruited and given a reading test, which eleven of them passed. These eleven were randomly assigned to code either charismatic behavior or charismatic effects and were trained using the previously developed materials. Once these students began to code the biographical passages that were used to provide the final measures of behavior and effects, their accuracy, that is percentage agreement with expert precoded training passages, was checked after every 75 passages they coded.

Two additional measures of presidential behavioral charisma were taken from Simonton (1988). Simonton extracted personality descriptions of American presidents from seven biographical reference works (i.e., *Current Biography,* 1940–1983; *Encyclopedia Britannica,* 1974; Bailey, 1980, 1981; Boller, 1981; Armbruster, 1982; Whitney, 1982), removed all identifying material, and put the extracts in random order. Seven students rated each president on 82 style items, using a scale ranging from 1 (extremely atypical) to 7 (extremely typical). Simonton retained for further analysis 49 items for which the internal consistency reliability of the seven ratings was .60 or greater.

A factor analysis of the retained scores produced four factors, one of which Simonton labelled charisma and one of which he labelled creativity. Style items loading high on the charisma factor included "finds dealing with the press challenging and enjoyable," "enjoys the ceremonial aspects of office," "is charismatic," and "is characterized by others as a world figure." Items loading high on the creativity factor included "initiates new legislation and programs," "is innovative in his role as an executive," and "able to visualize alternatives and weigh long-term consequences." Simonton's measure of presidential creativity was included in our study because charisma, as defined by House (1977), Bass (1985), and others, includes the articulation of a vision and the creation of new beliefs, values, and goals for followers.

Presidential performance. To measure presidential performance, the focus of our research, two sets of data were used. The first set of data consisted of four measures of presidential performance used previously by Winter (1987) and one measure created by Murray and Blessing (1983). Three additional measures of presidential performance were created for this study.

David Winter provided us with four indices of presidential performance described in Winter (1987). These included "war entry," defined in terms of a list developed by Richardson (1960) and "war avoidance," crises that could have developed into wars but were settled peacefully.

Maranell (1970) had surveyed 571 historians of the United States to rate presidents on several dimensions, including general prestige, strength of action, presidential activeness, and accomplishments of the administration. From these four scales, Winter (1987) constructed a measure of perceived performance that he called "consensus of greatness." He also calculated a measure of performance based on "decisions that have historic impact on the country and world." This measure was based on a compilation made by Morris (1967) and included such decisions as the Louisiana Purchase by Jefferson and the abolition of central banking by Jackson. Winter referred to this last measure as "great decisions cited."

We also used one additional, previously published measure of presidential performance, a mean greatness score. Murray and Blessing (1983) sent a 19-page questionnaire to all Ph.D -holding American historians with the rank of assistant professor or above who had been listed in the American Historical Association's *Guide to Departments of History* for 1979 and 1980–81. Recipients were asked to rate all presidents except W. H. Harrison, J. Garfield, and R. Reagan on a 5-item scale that ranged from "great" to "failure." Of 1,997 questionnaires sent out, 846 were returned. Murray and Blessing (1983) calculated mean greatness scores from the individual ratings.

To supplement these previously published measures of presidential performance, three new measures of presidential performance were calculated. Three areas of presidential activity were identified: international relations, domestic and international economy, and domestic social issues. Within each area, seven types of activities were defined: "military action," "peace initiatives," "other negotiations," "appointments," "legislation," "mass appeals," and "other actions." Each of these was defined twice, for example, military action taken and refused military action. Finally, each specific action was listed twice by outcome, successful and unsuccessful. So, for example, on the resulting coding form, one of the codeable options was "successful military action in the area of international relations." There were 84 codeable options: three areas × seven types of activities × two options (action taken/action refused) × two types of outcomes (successful/unsuccessful). Using this coding form, seven coders were randomly assigned to code presidential actions for a number of terms of office using presidential biographies in *Colliers Encyclopedia* (1983) or *Encyclopedia Britannica* (1985). *Colliers Encyclopedia* contained one biography per president, which was used in this study. *Encyclopedia Britannica* contained a small biography of each president in the *Micropedia* and a larger biography for several presidents in the *Macropedia*. The larger biography was used wherever available. For each assigned term, each coder read the assigned text and coded as many of the 84 categories on the coding form as applied. Subsequently, net performance scores were calculated for each type of performance for each president by subtracting unsuccessful performance scores from successful performance scores. For each of the three types of presidential performance, four

measures (two coders × two sources) were available for testing the hypotheses developed in this study.

A total of six sets of data were thus scored by four separate groups of coders. Activity inhibition, crises, and three measures of presidential performance (international, economic, and social) were coded by one group of coders from three different sources. Extracts of cabinet member biographies, motive scores from presidential inaugural speeches, and Simonton's (1986, 1988) measures of charisma and creativity were each coded by three different groups of coders. The raw data is given in the Appendix.

Statistical Procedures

The seven hypotheses developed above were tested with Wold's (1985) partial least squares (PLS) technique, as implemented by Lohmoller (1984). PLS is similar to LISREL in that both structural relations among latent variables and relationships between latent variables and observed variables may be modelled, but PLS has two advantages over LISREL for our study. PLS does not require multivariate normal data as does LISREL maximum likelihood estimation, and PLS is suitable for the analysis of small samples like ours (Wold, 1985), whereas LISREL requires substantially larger sample sizes (Boomsa, 1982).

We chose PLS in preference to traditional multiple regression procedures for three reasons. First, in the PLS procedure, relationships among latent variables are estimated and tested within the context of a measurement model. In traditional multiple regression, tests of the significance of coefficients of independent variables assume that variables have been measured without random error, an assumption that in the social sciences is often dubious (Fornell, 1982). Second, PLS allows one to perform combined regression and factor analysis within the same statistical procedure, since factors or latent variables created as linear combinations of observed variables in the first stage are then used in regressions that use the latent variables (Wold, 1985). In traditional multiple regression, scales are created by averaging observed variables or by some kind of factor analysis and then imported into a regression model. The assumption is that such scores are portable, an assumption that Fornell (1984) argued is not tenable. Third, PLS generates a variety of reliability and validity statistics that are calculated in the context of the model under investigation, whereas in traditional regression procedures such statistics, for example Cronbach's alpha, may be calculated independent of the model being tested. In PLS, reliability may be assessed by examining factor loadings of observed variables on latent variables. Fornell and Larcker (1981) suggested that factor loadings should exceed .7, a more stringent criterion of reliability than the .3 or more researchers have traditionally accepted in principal components factor analysis. Reliability may also be assessed by a latent variable's composite scale reliability, which is a measure of internal consistency reliability analogous to Cronbach's alpha. Fornell and Larcker (1981) suggested a .7 criterion for this measure. Fornell and Larcker (1981) suggested that the average variance extracted by the latent

variables from observed variables could be used as another index of internal consistency reliability, using a criterion of .5 or more. Convergent validity may be assessed by examining the factor loadings of each observed variable on its latent variable. If the observed variables are derived from distinct methods and yet load high on the latent variable, then there is evidence for the convergent validity of the measure. Discriminant validity of latent variables may be assessed. The variance shared between any two latent variables should be lower than the variance shared between either of these two latent variables and its measures (as measured by the latent variable's average variance extracted).

The Basic PLS Substantive Model

The basic PLS model used to test the hypotheses consisted of a structural equations submodel relating latent variables to one another and a measurement submodel relating observed variables to latent variables.

The basic structural equations submodel consisted of the following latent variables: institutional age, power, achievement, affiliation, activity inhibition, crises, behavioral charisma, and five latent variables of presidential performance. Relationships among the latent variables were specified in terms of the general model of personality, behavioral charisma, and performance developed in the hypotheses and Figure 1: The latent variable of behavioral charisma was defined as a function of the latent variables of power, achievement, affiliation, activity inhibition, institutional age, crises, and random error in equations; the five latent variables of presidential performance were specified to be the result of behavioral charisma, power, achievement, affiliation, activity inhibition, crises, institutional age, and random error in equations.

In the measurement submodel, institutional age was assumed to be measured without error. Presidential power, achievement, affiliation, and activity inhibition were each assumed to be measured without error. This assumption was erroneous but was made because only one measure of each motive was available. The four available measures of crises were defined to be the result of a crises latent variable and random error of measurement. The four observed measures of behavioral charisma were each defined to be a function of a single latent variable, behavioral charisma, plus random error of measurement.

Each measure of performance was defined to be the result of a latent performance variable and random error of measurement. War entry, war avoidance, and great decisions cited were defined to be expressions of a single latent variable labelled *direct presidential action*. These three measures were hypothesized to be expressions of a single latent variable because they were significantly intercorrelated, all were quantitative or objective rather than perceived measures of performance, and all were measures of similar forceful types of actions. Winter's (1987) measure of consensus of greatness and Murray and Blessing's (1983) measure of mean greatness were defined to be expressions of a single latent variable labelled *perceived greatness*. We viewed these two items as expressions of a single

underlying variable because they were both subjective estimates of greatness by experts and because the two scales were correlated .96. *Social, economic,* and *international relations* performance latent variables produced four observed variables each, namely, performance scores coded by two coders using two biographical sources, *Encyclopedia Britannica* and *Colliers,* for each president.

A critical assumption of this PLS substantive model is that errors of measurement in the observed variables are random. If this assumption is false and errors of measurement are correlated across observed variables, then tests of hypotheses would be invalid because covariation among latent variables would contain covariation actually due to uncontrolled correlated error of measurement. This type of response bias would likely generate high correlations among various observed measures of latent variables, high loadings of observed variables on latent variables, as well as the strong relationships among independent and dependent latent variables in the substantive model. The validity of this assumption that errors of measurement were uncorrelated with each other is analyzed in the discussion section below.

The Common Pool of Historical Fact and Interpretation Model

A plausible alternative to the substantive model tested in this paper is the model that explains relationships among observed variables as arising from a common source of fact and interpretation. We predicted that if this model were in fact valid, data items would uniformly load on a latent construct representing this common pool and that this latent factor would be positively related to institutional age. In principle it was possible to test a model in which all the available items except institutional age load on the supposed latent factor. However, we had 31 variables, excluding institutional age, and 31 observations, resulting in an excessively low ratio of observations to variables. Therefore, we tested five versions of the common-pool model. In each test, six randomly selected items were predicted to load high and uniformly on the latent construct. We also expected that if the common-pool model were an adequate model of the data, the latent common-pool factor would exhibit adequate discriminant validity: We expected that the correlation of the latent factor with its measures would be higher than the correlation of the latent factor with time, the second construct in the common-pool model.

The Attribution Model

To test the plausibility of the attribution model as an alternative to the substantive model, we reran the basic substantive model but substituted our two measures of editorial charisma for the four measures of behavioral charisma. If the attributional claim is correct that perceptions of performance cause perceptions of charisma, we would expect that the relationships between our latent editorial charisma variable and our latent performance variables would be trivial or nonsignificant. If the substantive model is valid and charisma causally affects performance, we would expect positive and substantial relationships between editorial charisma and the five latent performance variables

RESULTS

Table 1 shows the reliability and factor loadings of measures used to test the substantive model. All observed variables had factor loadings on their respective latent variables of greater than .7, except for three measures of international relations performance, two measures of economic performance, and three measures of social performance. All observed variables had loadings greater than the traditional criterion value of .3, and all loadings except one were significant at less than .0005 (one-tailed test) Internal consistency reliability (composite scale reliability) of all latent variables was greater than the .7 advocated by Fornell and Larcker (1981), and the average variance extracted was greater than .5 for all latent variables except international relations performance and social performance.

The convergent and discriminant validity of the measures used to test the substantive model was adequate, as shown

Table 1

Internal Consistency Reliability and Factor Loadings of Measurement Items in Substantive Model*

Construct and items	Factor loading	Composite scale reliability	Average variance extracted
Crises			
Morris, coder 1	93	91	72
Morris, coder 2	88		
Schlesinger, coder 1	74		
Schlesinger, coder 2	83		
Behavioral charisma			
Charismatic behavior	73	87	63
Charismatic effects	80		
Simonton charisma	88		
Simonton creativity	76		
Direct action			
War entry	83	85	.65
War avoidance	71		
Great decisions cited	87		
Subjective performance			
Consensus of greatness	97	97	94
Mean greatness	97		
International relations performance			
Britannica, coder 1	69	75	45
Britannica, coder 2	59		
Colliers, coder 1	90		
Colliers, coder 2	39		
Economic performance			
Britannica, coder 1	87	82	55
Britannica, coder 2	54		
Colliers, coder 1	62		
Colliers, coder 2	87		
Social performance			
Britannica, coder 1	86	75	44
Britannica, coder 2	65		
Colliers, coder 1	58		
Colliers, coder 2	51		

* All loadings are significant at less than .0005 (one-tailed tests) except the loading of the *Colliers,* coder-2 item on the international relations performance latent variable

Table 2

Discriminant Validity of Latent Variables in Substantive Model*

Construct	1	2	3	4	5	6	7
1. Crises	85						
2 Behavioral charisma	41	79					
3 Direct action	51	50	81				
4 Subjective performance	22	56	77	97			
5 International performance	04	08	28	27	67		
6 Economic performance	19	56	08	23	41	74	
7 Social performance	16	40	39	53	24	17	66

* Diagonal elements are correlations of each construct with its measures (square roots of average variance extracted) Off-diagonal elements are correlations between constructs For adequate discriminant validity, diagonal elements should be larger than the entries in corresponding rows and columns (Fornell and Larcker, 1981)

in Tables 1 and 2. All factor loadings in Table 1, except one, were high and significant, even though the observed variables loading on each latent variable came from distinct sources. From Table 2 it is clear that each latent variable was more highly correlated with its measures than with any other latent variable.

Test of the Substantive Model Using Behavioral Charisma

Results summarized in Table 3 support hypothesis 1. Activity inhibition and need for power significantly and positively predicted presidential behavioral charisma. Achievement was negatively and significantly related to behavioral charisma, as predicted. Affiliation was negatively related to behavioral charisma but was not significant. Behavioral charisma was strongly and positively related to presidential direct action, presidential subjective performance, presidential economic performance, and presidential social performance, as predicted by hypothesis 2. Coefficients relating behavioral charisma and performance were large and significant at less than .005, one-tailed tests. Only in the case of international relations performance was there a nonsignificant relationship. Findings presented in Table 3 strongly support hypothesis 3. Power and activity inhibition were positively and significantly related to four of five measures of presidential performance, and achievement and affiliation were negatively and significantly related to three of five measures of performance.

Crises was significantly and positively related to behavioral charisma and three of five measures of presidential performance, as predicted by hypothesis 4, and institutional age was positively and significantly related to behavioral charisma, presidential motives, and crises, as predicted by hypothesis 5. Institutional age was negatively related to presidential direct action, perhaps because direct presidential action has become increasingly difficult as the complexity and responsibilities of the presidency have increased over time. Institutional age was positively related to presidential international relations performance, perhaps because the international relations role of the presidency has expanded dramatically over time. Finally, there was an unexpected negative relationship between presidential subjective performance and institutional age. This relationship may reflect a tendency of experts to view the "founding fathers" more favorably than more recent presidents

Table 3

Tests of Hypotheses Relating Motives, Charisma, and Performance of American Presidents in Substantive Model

Dependent variable	R^2	Independent variable	Hypothesis No.	Predicted path coefficient	Standardized path coefficient
Presidential charisma	24	Power	1	+	+ 234**
		Achievement	1	−	− 189****
		Affiliation	1	−	− 086
		Activity inh	1	+	+ 237****
		Crises	4	+	+ 282***
		Inst age	5	+	+ 120*
Presidential direct action	66	Charisma	2	+	+ 210****
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*$p < .05$, **$p < .025$, ***$p < .005$, ****$p < .0005$, one-tailed tests
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Test of the Substantive Model Using Editorial Charisma

The basic substantive model diagrammed in Figure 1 was tested a second time using two measures of charisma extracted from editorials appearing in the *New York Times,* rather than the four-measure index of behavioral charisma. Coefficients relating editorial charisma to direct action, international relations performance, economic performance, social performance, and subjective performance were, respectively, .485 ($p < .001$, one-tailed test), .503 ($p < .001$, one-tailed test), − 103 (not significant), −.148 ($p < .025$, two-tailed test), and .347 ($p < .001$, one-tailed test). The sample size for this second test was 21 presidents, not 31

presidents, due to the fact that *New York Times* editorials for presidents prior to Pierce were not available.

Tests of the Common Pool of Historical Fact and Interpretation Model

The common-pool model was tested five times, each PLS test using a randomly selected subset of six of the available 31 items. We predicted that if the common pool of historical fact and interpretation actually accounts for the observed relationships among the data that each subset of items would load high and uniformly on the latent factor, that institutional age and the latent common-pool factor would be positively related, and that the latent factor representing the common pool would exhibit adequate discriminant validity. Of the 30 factor loadings generated by the five tests, nine were larger than the .7 criterion suggested by Fornell and Larcker (1981). In two models, need for achievement loaded greater than .7 on the latent factor because the latent factor was calculated primarily from the need for achievement. Two measures of economic performance were included in a third model, defined the latent variable, and loaded highly on it. Two measures of crises were included in a fourth model, and loaded greater than .7 on the latent construct because the latent construct was derived primarily from the two measures. Further, in all five models, the estimated latent common-pool construct was more highly related to institutional age than to its own measures, exhibiting poor discriminant validity.

DISCUSSION

Given the number of organizational and environmental constraints operating on American presidents (such as checks and balances operating within the structure of government, party realities, public opinion, the power of the media, and tradition), it is remarkable that as much as 66 percent of the variability in a measure of direct presidential action (Table 3) may be explained by motives, behavioral charisma, institutional age, and crises. However, there are reasons to suspect that these numbers overstate or misstate the actual contribution of motives and behavioral charisma to presidential performance. At least four alternative explanations of these strong findings need to be evaluated. Further, these findings conflict with the situationalist perspective (Davis-Blake and Pfeffer, 1989), that organizational and social factors, rather than individual characteristics, determine individual behavior. Even if the situationalist perspective is invalid here, behavioral charisma may be an interaction of environmental characteristics and presidential characteristics, and these interactions were not tested in the PLS substantive model. If these findings prove to be valid, however, then they have a number of implications for organizational theory and practice.

Four Alternative Explanations

First, significant relationships reported in Table 3 may be due to spurious correlations with institutional age and crises. It is possible that crises are positively related to both behavioral charisma and performance, in which case any observed positive relationship between behavioral charisma and

performance might be due to correlations with crises and not the hypothesized causal effect of behavioral charisma on presidential performance. Likewise, it is possible that institutional age is positively related to presidential motives, crises, behavioral charisma, and presidential performance. Once again, observed relationships among these latent variables then would be due to correlations with institutional age rather than the causal mechanisms discussed in this study. These alternative explanations of the observed findings are unlikely, however, because the PLS substantive model incorporated institutional age and crises, so the three substantive hypotheses were tested net of any effects of institutional age or crises.

Second, single-source response bias may account for the observed findings. A number of authors (e.g., Salancik and Pfeffer, 1977a; Podsakoff and Organ, 1986) have argued that causal analyses that depend on independent and dependent variables measured at a single point in time with a single instrument such as an opinion questionnaire are suspect. In this study, we took some pains to avoid this very serious validity threat. Motive scores, activity-inhibition measures, and performance measures came from different sources, were coded by different coders, and were based on events that occurred at different times. Motive scores were taken from presidential first-term inaugural speeches. Performance measures were counts of behavior from distinct sources such as presidential biographies coded by scorers different from those who coded motive scores, or performance measures were based on expert opinion. Further, many of the data were objective (e.g., war entry, great decisions cited) and hence were less susceptible than subjective data to single-source response bias.

Third, relationships observed in Table 3 may have been due to a common pool of historical fact and interpretation. Our findings show that this possibility is unlikely, however, because the common-pool model we developed and tested proved to be a poor alternative to our basic substantive model. Loadings of items on the common-pool latent variable were not uniformly high as predicted by the common-pool model, and the five latent constructs exhibited poor discriminant validity.

Fourth, perceptions of performance may cause perceptions of charisma, rather than charisma causing performance. Possibly the most serious threat to our claim that leader behavioral charisma is one source of leader effectiveness was the counterclaim that any observed relationship between charisma and performance may be due to the attribution of charisma to leaders by observers who have *some perception of the leaders' performance*. To deal with this possibility, we tested our basic substantive model as diagrammed in Figure 1, using editorial charisma. Once again, charisma was positively and significantly related to performance. In this second test, the attributional alternative was an unlikely explanation of the findings because editorial charisma measures predated any knowledge subsequent historians and other experts might have had of presidents' performance. Further, the coders who scored the editorials for charisma were not aware of the identity of the

presidents, so they could not have attributed charisma to them from their own perceptions.

Personality, Behavioral Charisma, and Leader Performance: A Situationalist Critique

Salancik and Pfeffer (1977b), and Miendl, Ehrlich, and Dukerich (1985) expressed skepticism concerning whether leaders make a substantive difference in organizational outcomes. Most recently, Davis-Blake and Pfeffer (1989) argued that the search for dispositional effects in organizational research is "just a mirage." Davis-Blake and Pfeffer (1989) see individual behavior as a function of characteristics of situations rather than of individual dispositions or some interaction of dispositions and situations. They argued that this external control of behavior is particularly evident in organizations that are viewed as "strong situations." According to Davis-Blake and Pfeffer (1989), a common understanding about appropriate and meaningful behavior, organizational culture (symbols, stories, and rituals), compensation systems, unit and organizational goals, patterns of rewards and punishments, job design characteristics, patterns of socialization, and position in social information networks all affect behavior and tend to overwhelm any dispositional characteristics of organizational members. Empirical evidence for the prevalence of situational over dispositional sources of behavior in organizations comes from longitudinal studies that have shown that changes in situational characteristics result in corresponding changes in member attitudes, behavior, and dispositions.

We agree that individual behavior in organizations may be determined by organizational and social forces. However, we believe that the results of our study demonstrate that individual leader characteristics and the charismatic relationship between leader and followers also affect leader and organizational performance. Although alternative explanations cannot be ruled out entirely, we have made a strong case above that four alternative explanations of the findings presented in Table 3 are not likely to fully explain the observed relationships among personality, behavioral charisma, and performance.

Of course it is possible to argue that presidents who are elected are nothing more than a reflection of the culture and values of the society at that time That this is not the case has been demonstrated by Winter (1987). Winter tested relationships between the presidential motive scores used in the present study and motive scores used for the U.S society from 1790 through 1960. The societal motive scores were based on rigorous coding of popular novels, children's readers, and hymns. He found that congruence between presidential motives and societal motives was inversely correlated with political scientists' consensus of presidential greatness, avoidance of war at times of conflict (such as the Cuban Missile Crisis), and the number of great decisions made by the presidents, such as the Louisiana Purchase (by Jefferson) or the attack on business trusts (by T Roosevelt). Winter found presidential-societal congruence to be correlated with these three measures, − 39, −.46, and

−.37 ($p < .05$ for all correlations), respectively. This indicates that the motives of presidents whose administrations had positive substantive outcomes were incongruent with societal motives. Further, the power motive scores we used were positively related to these three presidential outcomes ($r = .34, .40$, and .51, respectively, $p < .05$) and also with entry into war ($r = .52$, $p < .01$). Thus, our findings, together with Winter's findings, show that presidential leaders do make a difference. They achieve both positive and negative substantive effects by enacting the power motive and by departing from societal motive norms. Such leaders are transcendental—they transcend the ethos of their times—and make a difference by being different

The Social Context of Behavioral Charisma: An Interactionist Critique

Our findings may also be questioned from an interactionist perspective: The charismatic relationship between leader and followers may be as much a matter of timing and circumstance as of leader personality characteristics such as need for power. Behavioral charisma emerges when leaders with the potential to be charismatic find themselves in organizations or situations that favor the emergence of behavioral charisma. If behavioral charisma is an interaction of leader characteristics and social characteristics, then the inclusion of exogenous variables such as institutional age and crises as main or direct effects into the basic PLS substantive model will not control for these interactive effects of personality and circumstances and will not adequately model these interactive effects.

A number of environmental variables may interact with personality characteristics to affect the emergence of behavioral charisma. One of these is the value system surrounding the leader. As Schwartz (1983) argued, the American presidency of the eighteenth century was a very different institution than it is in the twentieth century and the eighteenth-century model of heroic leadership was fundamentally different from the Weberian model of a charismatic leader. The ideal president, as personified by Washington, was the virtuous statesman who resisted the personal use of power. Under these circumstances, it would be difficult for a president with charismatic potential to emerge, whereas presidents taking office after the demise of this earlier model of leadership would find behavioral charisma much easier to attain. A second environmental factor that would facilitate or retard the emergence of behavioral charisma is the level of crises facing a leader. Numerous scholars (e.g., Bass, 1985; House, 1977; Bradley, 1987; Weber, 1946) have argued that crises facilitate the emergence of charismatic leaders. Crises provide opportunities for leaders to take bold, forceful action and may increase the willingness of subordinates and others to follow the leader. Third, the development of the mass media may have provided recent potentially charismatic leaders with a greater opportunity to develop behavioral charisma than earlier leaders. Fourth, organizational structure may favor or impede the emergence of charismatic leaders. In a highly structured formal bureaucracy, charismatic leaders

may emerge only with difficulty, since a major function of bureaucracy is to replace personal influence with impartial rules and procedures. In less bureaucratic and more organic organizations, where decision making is decentralized and participation in decision making is encouraged, role prescriptions are unclear, and rules and regulations are less coercive, a charismatic leader has a greater opportunity to emerge than in a traditional bureaucracy.

We agree that an understanding of the emergence of behavioral charisma requires attention to both individual characteristics of leaders as well as the context in which they operate. Studies of charisma as it relates to the leadership of organizations, nations, or social movements should include hypotheses about interactions between person and environment as well as tests of these hypotheses. Tests of such interactive hypotheses were impossible in our study due to the limited number of presidents available for study. To test the interactions of institutional age and crises with the four presidential personality characteristics we studied, it would be necessary to regress the latent variable of presidential behavioral charisma on the six variables used in the present analysis (four motives, institutional age, and crises) plus an additional eight interaction terms (such as need for power × crises). Such a regression would have a sample size of 31 and 14 predictors.

While we see this failure to test interaction hypotheses as a limitation, we do not feel that the omission is fatal. First, the omitted interaction terms focus on the development of behavioral charisma. We have demonstrated that behavioral charisma, regardless of the exact process by which it emerges, has a substantial impact on presidential performance. Second, we have shown that personality characteristics, institutional age, and crises predict behavioral charisma. It may be that these results misspecify the exact relationships among institutional age, crises, and personality, and if interaction terms were included in the model, these direct effects would become smaller and interactive effects would be significant. Third, if behavioral charisma is to some extent an interaction of leader personality and social characteristics, then it is possible that the inclusion of such interaction terms would increase the predictability of behavioral charisma beyond the 24-percent level we have reported, which may be an underestimate of the extent to which behavioral charisma may be predicted

Future research will be able to test these interactions of environmental characteristics and leader personality. It will be of particular interest to determine the extent to which personality and environment have direct rather than interactive effects on behavioral charisma. We have demonstrated that it is possible to develop reliable and valid measures of crises. Standard measures for relevant aspects of organizational structure such as degree of bureaucratization and mechanistic versus organic structure are available (e.g., Van de Ven and Ferry, 1980), and it is possible to include interaction as well as direct effects in PLS models (Rossa, 1982).

Organizational Implications

To the extent that the leader's goals and values are congruent with the goals and values of the organization, charismatic leadership provides a strong link between organizational goals and members' commitment to such goals. To the extent that the leader's goals and values are in conflict with those of the organization, as when leaders represent a challenge to the status quo, charismatic leadership is likely to induce negative attitudes toward the organization and resistance to directives from management by organizational members. Thus charismatic leadership is a strong force for or against members' commitment to organizational goals.

A second implication of the present findings for organizational theory and practice concerns the early detection of leadership potential. The finding that presidential performance is related to presidential power, power inhibition, affiliation, and achievement suggests that effective leaders may be identifiable at a relatively early age on the basis of their personality profile.

The findings from this and prior studies also suggest a third implication for organization theory: the conditions under which charismatic leadership is most likely to be required and effective. We speculate from these findings that charismatic leadership is required, or is at least more appropriate, in situations that require a combination of highly involved and active leadership and emotional commitment and extraordinary effort by both leader and followers in pursuit of ideological goals. We speculate that situations that possess these attributes are thus situations in which charismatic leaders make their greatest contribution. Under conditions requiring routine but reliable performance in the pursuit of pragmatic goals, charismatic leadership is less likely to be required and may even be dysfunctional. Further, charismatic leadership seems most likely to emerge under conditions of crisis, in organic and decentralized rather than mechanistic and bureaucratic organizations, and in the context of value systems that allow the emergence of personal power.

Complexity and change characterize the modern world. Leaders of large enterprises and nation states cannot rely solely on traditional face-to-face encounters, direct supervision, and rules and regulations. Modern organizations need cohesion, inspiration, and basic values. Effective leaders provide these through their own values, their personal example, their enthusiasm, and their confidence in themselves and in others. They are effective because they are charismatic

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APPENDIX: Raw Data

This table contains data on all 39 presidents from Washington to Reagan, inclusive The basic analyses of this paper were based on a subset of 31 of these presidents InAge = years since 1788 to the midpoint of the president's first term of office, Pow = power; Ach = achievement, Aff = affiliation, Inh = activity inhibition, Crs1 = crises (Morris, coder 1); Crs2 = crises (Morris, coder 2), Crs3 = crises (Schlesinger, coder 1), Crs4 = crises (Schlesinger, coder 2); Ed1 = charisma coded from *New York Times* editorials (coder 1), Ed2 = charisma coded from *New York Times* editorials (coder 2); Chr1 = charismatic behavior, Chr2 = charismatic effects, Chr3 = Simonton charisma, Chr4 = Simonton creativity, Ware = war entry, Wara = war avoidance, Gdec = great decisions cited, Irl1 = international performance (*Britannica,* coder 1), Irl2 = international performance (*Britannica,* coder 2), Irl3 = international performance (*Colliers,* coder 1), Irl4 = international performance (*Colliers,* coder 2), Eco1 = economic performance (*Britannica,* coder 1), Eco2 = economic performance (*Britannica,* coder 2), Eco3 = economic performance (*Colliers,* coder 1), Eco4 = economic performance (*Colliers,* coder 2), Sc1 = social performance (*Britannica,* coder 1), Sc2 = social performance (*Britannica,* coder 2), Sc3 = social performance (*Colliers,* coder 1), Sc4 = social performance (*Colliers,* coder 2), Grt = mean greatness, Cns = consensus of greatness, nd = no data available.

President	InAge	Pow	Ach	Aff	Inh	Crs1	Crs2	Crs3	Crs4	Ed1	Ed2
Washington	2	41	39	54	3 01	2	2	5	7	nd	nd
J Adams	10	42	39	49	56	3	6	6	3	nd	nd
T Jefferson	14	51	49	51	− 93	3	4	7	4	nd	nd
J Madison	22	57	55	51	41	9	13	15	9	nd	nd
J Monroe	30	51	57	46	−2 86	4	8	9	6	nd	nd
J Q Adams	38	37	48	51	−4 73	1	3	7	3	nd	nd
A Jackson	42	45	43	47	−1 39	4	9	10	6	nd	nd
M Van Buren	50	40	42	48	45	6	8	14	7	nd	nd
W H Harrison	52 5	40	32	41	−6 31	1	0	1	7	nd	nd
J Tyler	54	nd	nd	nd	−5 15	6	6	10	4	nd	nd
J Polk	58	50	33	41	−3 51	6	10	14	8	nd	nd
Z Taylor	61	41	53	53	2 03	3	2	4	8	nd	nd
M Fillmore	63	nd	nd	nd	40	0	3	7	3	nd	nd
F Pierce	66	50	49	44	−3 61	2	9	9	5	2	2
J Buchanan	70	42	46	47	−3 57	9	5	6	4	3	3
A Lincoln	74	53	36	45	4 22	13	16	14	13	3	3
A Johnson	78	nd	nd	nd	−1 14	2	5	3	6	1	2
U S Grant	82	36	56	47	1 20	1	4	4	5	3	3
R B Hayes	90	48	51	48	−4 78	0	4	5	7	3	2
J Garfield	92 5	49	46	35	−4 82	1	2	1	8	3	3
C Arthur	94 5	nd	nd	nd	−4 13	1	3	3	8	3	1
G Cleveland	98	63	53	46	− 65	0	1	3	9	3	2
B Harrison	102	45	37	45	60	1	2	2	7 78	2	2

(*continued*)

President	InAge	Pow	Ach	Aff	Inh	Crs1	Crs2	Crs3	Crs4	Ed1	Ed2
W McKinley	110	46	47	41	−4 14	12	9	9	13	2	2
T Roosevelt	118	38	62	38	5 77	7	14	6	8	3	1
W Taft	122	58	44	38	−14 64	2	11	7	3	3	3
W Wilson	126	53	66	49	2 08	10	13	15	11	3	3
W Harding	133 5	42	48	57	−3 14	8	8	7	8	1	2
C Coolidge	138	45	44	46	−1 25	6	5	5	6	3	1
H Hoover	142	48	68	45	−1 73	9	6	13	10	1	1
F Roosevelt	146	61	53	44	−1 80	6	12	6	6	3	3
H Truman	162	78	56	65	26	6	13	7	7	3	3
D Eisenhower	166	49	43	57	−4 67	8	10	9	9	2	2
J F Kennedy	173 5	77	50	85	79	12	12	11	12	3	3
L Johnson	178	49	55	59	−1 11	14	13	7	14	2	2
R Nixon	182	53	66	76	4 74	13	17	14	15	2	2
G Ford	187	nd	nd	nd	− 52	7	8	13	8	1	1
J Carter	190	59	75	59	0	10	14	9	11	1	1
R Reagan	194	63	60	51	nd	5 8	8 6	8 21	7 78	3	3

President	Chr1	Chr2	Chr3	Chr4	Ware	Wara	Gdec	Irl1	Irl2	Irl3	Irl4
Washington	12	9	10	02	1	2	2	2	2	2	0
J Adams	7	10	− 30	6	1	2	1	4	1	0	4
T Jefferson	17	32	20	1 4	2	2	1	1	0	2	1
J Madison	9	9	- 1 2	1	2	1	2	−2	0	−2	−2
J Monroe	11	12	−0 9	−0 2	1	2	1	3	2	2	4
J Q Adams	17	17	−0 6	-0 1	1	1	1	0	0	−4	0
A Jackson	56	59	2 2	1 9	1	1	2	0	1	2	0
M Van Buren	7	13	0 1	−1	1	2	0	−1	0	1	2
W H Harrison	nd	nd	--0 7	- 1 5	nd	nd	nd	0	0	1	3
J Tyler	11	15	- 0 1	1 1	nd	nd	nd	2	2	1	1
J Polk	41	28	- 0 1	0 6	2	2	2	6	3	4	2
Z Taylor	nd	nd	−0 2	0	1	1	0	−2	−1	−1	−2
M Fillmore	4	2	− 70	− 1 7	nd	nd	nd	1	0	1	0
F Pierce	42	29	9	3	1	1	0	−1	1	2	−2
J Buchanan	18	12	0	- 1 2	1	1	2	0	0	0	−1
A Lincoln	43	63	5	0 3	2	2	2	0	1	0	−1
A Johnson	12	31	2	6	nd	nd	nd	−1	0	0	0
U S Grant	20	10	--2 2	- 1 1	1	1	0	1	1	−2	2
R B Hayes	15	19	− 8	- 8	1	1	0	0	0	0	−2
J Garfield	nd	nd	6	6	nd	nd	nd	0	1	0	−1
C Arthur	10	15	0	- 1 2	nd	nd	nd	0	0	−1	1
G Cleveland	30	32	- 1 50	- 1	1	2	2	0	2	1	1
B Harrison	20	11	− 1	9	1	2	0	3	2	4	0
W McKinley	8	11	6	0	2	1	1	2	2	3	3
T Roosevelt	43	40	1 2	0	1	2	2	1	0	5	1
W Taft	37	21	- 1 1	−2 2	1	1	1	1	0	0	1
W Wilson	19	26	0	5	2	2	3	2	−2	5	1
W Harding	69	74	- 5	- 1 4	1	1	0	1	0	0	1
C Coolidge	19	28	−1 9	- 1 4	1	1	0	0	0	2	0
H Hoover	20	25	− 6	0 6	1	1	0	0	0	0	0
F Roosevelt	87	102	2 5	1 4	2	2	2	0	0	0	0
H Truman	22	19	0	0 8	2	2	2	1	−1	2	1
D Eisenhower	37	28	6	2	1	2	1	3	−1	1	3
J F Kennedy	39	36	1 3	1 1	2	2	3	2	2	1	2
L Johnson	24	30	1 5	1 3	2	2	2	−1	−1	−1	−1
R Nixon	nd	nd	3	1 4	1	nd	nd	1	1	−1	1
G Ford	nd	nd	− 1	- 4	nd	nd	nd	1	1	1	1
J Carter	nd	nd	− 4	2	1	nd	nd	3	1	2	3
R Reagan	nd	nd	1 2	1 1	nd	nd	nd	1	0	−3	1

President	Eco1	Eco2	Eco3	Eco4	Sc1	Sc2	Sc3	Sc4	Grt	Cns
Washington	3	2	2	1	1	2	2	0	5	1 09
J Adams	−1	- 1	0	0	0	0	−1	0	3 85	33
T Jefferson	−1	1	3	−1	0	1	4	0	5	1 1
J Madison	0	0	−1	0	0	0	0	0	3 1	01
J Monroe	0	1	2	1	1	1	4	1	3 1	− 04
J Q Adams	1	2	−3	0	0	1	4	0	3 1	− 16
A Jackson	7	3	2	7	0	1	3	0	4 3	1.03
M Van Buren	0	3	−2	1	1	2	1	0	2 9	− 44
W H Harrison	1	0	2	1	0	0	1	0	2 9	nd
J Tyler	0	1	0	2	2	2	--1	1	nd	nd
J Polk	4	3	1	−1	3	3	2	0	3 85	38
Z Taylor	−1	- 1	−1	1	−1	0	1	0	1 95	− 95
M Fillmore	1	0	1	−1	1	3	2	−1	nd	nd

(continued)

President	Eco1	Eco2	Eco3	Eco4	Sc1	Sc2	Sc3	Sc4	Grt	Cns
F Pierce	0	3	1	2	2	1	−2	1	1 95	−1 35
J Buchanan	0	−2	0	−1	−4	−2	−4	1	1 5	−1 28
A Lincoln	0	0	−1	0	5	2	2	1	5	1 58
A Johnson	0	0	0	0	−1	−1	−1	−2	nd	nd
U S Grant	1	2	−2	1	−1	3	−3	0	1 25	−1 46
R B Hayes	0	2	0	1	2	1	2	0	2 9	− 74
J Garfield	0	1	0	0	1	2	−1	0	nd	nd
C Arthur	0	−2	1	0	3	0	−1	1	nd	nd
G Cleveland	−1	4	0	1	2	4	1	1	3 6	09
B Harrison	2	1	1	1	−1	1	2	0	nd	− 99
W McKinley	1	1	1	1	0	0	0	0	2 9	− 4
T Roosevelt	1	2	1	2	0	0	2	0	4 3	1 23
W Taft	−1	−1	−1	−1	1	0	−1	1	2 9	− 19
W Wilson	2	3	2	2	2	0	1	0	4 55	1 01
W. Harding	2	2	0	1	0	0	0	1	1	−1 75
C Coolidge	1	2	2	1	0	0	0	0	1 95	−1 25
H Hoover	1	0	1	1	0	0	−1	1	2 9	− 28
F Roosevelt	3	1	2	2	2	2	1	2	5	1 74
H Truman	1	−1	−1	1	1	0	1	1	4 07	97
D Eisenhower	1	0	−1	1	1	1	1	1	3 13	− 49
J F Kennedy	2	1	0	1	0	0	1	−1	3 2	57
L Johnson	0	−1	0	1	1	1	2	1	3 7	64
R Nixon	3	2	2	3	1	−1	−1	0	1	nd
G Ford	−1	1	1	−1	0	0	0	0	nd	nd
J Carter	1	0	2	1	0	1	1	0	2 8	nd
R Reagan	−1	1	1	−1	0	0	−1	1	nd	nd