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DEVELOPMENT OF OUTSTANDING LEADERSHIP

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ABSTRACT

The differences between the types and content of developmental experiences that a sample of outstanding leaders experienced in early life were examined. Relevant sections of 120 biographies of outstanding leaders in the 20th Century were content coded using a life narrative framework. The results indicated that individuals evidencing a particular leadership type (charismatic, ideological, or pragmatic) and the orientation variants of each (socialized or personalized) were linked to certain types of developmental events. Similarly, event content was found to vary between the leader styles. Specific kinds of experiences were also related to various indices of leader performance. Practical and theoretical implications of these findings are discussed.

Development of Outstanding Leadership

After celebrating numerous successful influence experiences during his stint at the Tennessee Valley Authority (TVA), charismatic leader David Lilienthal applied the same strategies of communicating a "grass roots" movement to diverse international followers through work with the overseas development firm, the Development and Resources Corporation (Hargrove, 1990). It seems that Lilienthal construed the nature of the complex situation of distributing energy resources overseas to require the same set of actions (i.e., delivering inspirational future-based speeches to multiple constituencies) he used to garner support while at TVA. Interestingly, he came to understand inspirational communication as a powerful influence technique before he acquired any substantial leadership roles. During Lilienthal's collegiate years at DePauw University, he joined the college debate team and won the Indiana state oratorical contest, where he gained experiences influencing audiences from a "Quaker congregation to a high school crowd" (Lilienthal, 1984).

Other types of leaders have shown patterns of stylized problem solving before coming into power as well. For example, personalized pragmatic leader David Sarnoff learned early on that the use of threat and coercion would solve his problems with others. Specifically, upon being angered by a teacher in elementary school, Sarnoff threatened the school's principal that he would report to the Jewish newspapers that the teacher had made anti-Semitic comments while teaching. Due to the severity of this charge, the teacher was soon fired from the school. This aggressive style of negotiation continued throughout Sarnoff's years with RCA (Lyons, 1966).

It seems that the mental models that leaders use to solve organizational problems may have their origins in early personal experiences. The role of personal experience has been an overlooked implication in the understanding of outstanding leadership. It may be that outstanding leadership, and the tendency for leaders to apply charismatic, ideological, or pragmatic frameworks when solving organizational problems, will be influenced by both the narratives people use to understand experiences in their lives (Habermas, 2001) and the events that provide a basis for the formation of such narratives (McAdams, 2001; Pillemer, 2001). Following from these observations, the intent of the present study is to examine how outstanding leaders come to construe problems they encounter differently based on episodic events in their past.

Outstanding leadership

Leadership is essentially the execution of discretionary skills to solve organizational problems in complex, dynamic social domains (Bass, 1985; Conger & Kanungo, 1988; Mumford & Connelly, 1991). Moreover, leadership permits a degree of personal choice concerning how to go about defining problems, generating solutions, and implementing policies in a social system (Fleishman, Mumford, Zaccaro, Levin, Korotkin, & Hein, 1991). Most organizational problems tend to be ill-defined, if defined at all (Anderson, 1983), requiring leaders to seek out and delineate the nature and goals of their problem-solving activities (Mumford & Connelly, 1991). This problem finding or construction, due to the complexity endemic to organizational conditions, allows multiple pathways to successful problem solving, which could explain why several different styles of leaders exist (Bass, 1985; House, 1977; Mumford & Van Doorn, 2001; Strange & Mumford, 2002).

The most heavily researched style is that of vision-based affective magnetism, or charismatic leadership (Bass, 1985). Alternative frameworks have been developed to describe other types of leaders. Ideological leadership, or belief-based leadership, is a strategy that employs personal values and beliefs in decision-making and motivating (Strange & Mumford, 2002). Pragmatic, or problem-based, leadership is focused on the careful analysis and solution of day-to-day issues in the immediate environment (Mumford, & Van Doorn, 2001). Another discrepancy between leadership strategies is that each can be associated with positive or negative behaviors for attaining outcomes (O'Connor, Mumford, et al., 1995). This distinction has been labeled as two integrity-related orientations: socialized (i.e., focused on increasing performance of the group) or personalized (i.e., focused on personal glorification) (House & Howell, 1992; McClelland, 1975).

Charismatic leadership. Much literature has been devoted to elucidating characteristics of these opposing strategies of charismatic, ideological, and pragmatic leadership, as well as the socialized and personalized variants of these three types. Descriptions of charismatic leaders point to the presence of a passionate vision of a future radically different from present conditions (House, 1977; Shamir, House, & Arthur, 1993; Weber, 1947). Such vision statements promise a dramatically improved state of existence for followers if they accept the leader's movement (House & Howell, 1992). Following from this, House and Podsakoff (1994) illustrated that charismatic leadership relies on inspirational communication to followers. Charismatic visions tend to point only to the positives of the future goals, while conveying negatives of the present conditions (Conger, 1999). This characteristic highlights a flaw endemic to charismatic leaders—

they appear to be overconfident in forecasting future conditions upon acceptance of their visions (Conger, 1989).

The effects of offering an appealing different view of the future are especially salient in conditions of turbulence due to crises (House & Howell, 1992; Hunt, Boal, & Dodge, 1999). Specifically, during such times of change, individuals may lose their identities and self-worth. Charismatic leaders, by communicating a set of loosely tied goals for the future, provide followers with a new identity and renewed sense of meaning that reduces anxiety (Shamir, House, & Arthur, 1992). An additional result of these sets of positive future goals is that they tend to appeal to multiple constituencies of individuals. For example, Franklin Roosevelt was able to attract multiple types of followers with his vision for a better future through government sponsored projects (Morgan, 1985).

Another characteristic of charismatic leaders is the strategy of direct influence they employ (House & Howell, 1992). Affective in the communication of their visions, such leaders also engage followers by creating a heroic or idolized image for others (Conger & Kanungo, 1998). These external representation activities involve public risk-taking as well as behaviorally role modeling the values implied by the vision (House, 1977).

Ideological leadership. Ideological leaders focus on past conditions, and they point to positive examples of a group's history such as prior group status and ownership (Post, Ruby, & Shaw, 2002). Their visions are predominantly defined by a steadfast commitment to their personal beliefs and values (Strange & Mumford, 2002). Ideological

leaders use such belief systems to guide them in decision-making, which leads to selective interpretation or discounting of alternate views that disagree with those personal beliefs (Robinson, 1996). In addition to discounting ideas that do not corroborate with their principles, ideological leaders also tend to dismiss individuals who do not share in their beliefs (Post, Ruby, & Shaw, 2002). This affects their followers in that ideological leaders define clear prescriptions or standards of acceptable behavior, and they tend to punish those who deviate from those principles (Ibrahim, 1977).

Ideological leaders may come from conditions marked by social injustice or inequitable distribution of resources for their group (Post, Ruby, & Shaw, 2002). This could lead to such leaders forming a negative appraisal of the future, or believing that there is a poor financial and social outlook for their group. Accompanying these conditions is the lack of meaningful work opportunities—conditions that give rise to the expression of the self in other ways, such as through the expression of beliefs. Finally, ideological leaders convey a sense of entitlement, or the belief that their group is owed something from society for past wrongs it has endured (Bond, Kwan, & Li, 2003).

Pragmatic leadership. Functional, problem-based leadership differs markedly from the two other forms of leadership (Mumford & Van Doorn, 2001). Pragmatic leaders are concerned with characteristics of the present situation, and they are constantly scanning their environment to gather information about key issues and concerns (Qin & Simon, 1990). This constant cataloguing or surveying of their surroundings exposes pragmatic leaders to a diverse array of people, places, and ideas. This acquired knowledge may help them in their subsequent problem-based analysis (Mumford & Van Doorn, 2001). Specifically, pragmatic leaders, earmarked by their functional dissection of

issues, exhibit flexibility and ease in adapting strategies when faced with incoming feedback that a particular strategy is not working. This is sharply contrasted by the other two styles, which appear to be more committed to their initial action plans and resistant to redirection.

Pragmatic leaders' malleability in problem solving may appear to indicate a lack of integrity or integrated decision-making. It probably reflects, however, their emphasis on gradual achievement towards a goal, or satisfaction with small steps or incremental progress to conclusion. Pragmatic leaders prefer to demonstrate their goal attainment through factual or concrete evidence to followers. Such leaders rely on numbers, statistical data, and facts to make decisions. Following from this, pragmatic leaders do not accept proposals based on emotional or ideological persuasion.

Personalized versus socialized distinction. In addition to exhibiting charismatic, ideological, or pragmatic styles of problem solving, leaders also evidence one of two orientations towards others. Socialized leaders base the identification and solution of problems based on the good of others, or for the collective interests of their group (House & Howell, 1992). They are more concerned with group maintenance than of protection of their own position within the group (O'Connor, Mumford, et al., 1995). In a study of socialized leaders, McClelland (1975) illustrated that they tend to be more altruistic, self-controlled, and follower-oriented. Such leaders tend to have a commitment to others, and they instill followers' self-responsibility, self-initiative, and autonomy when solving organizational problems (House & Howell, 1992).

Alternatively, personalized leaders are motivated by personal dominance regardless of the consequences for others (McClelland, 1975). In a study by O'Connor, Mumford and colleagues (1995), personalized leaders tended to control others with threat, and their goals were usually to control others and subvert them to their own personal agendas. These personalized leaders highly distrust others. Instead, they view others as objects with little regard for their well-being, safety or happiness (Howell & House, 1992). This need for power is unfettered by responsibility or activity inhibition (O'Connor et al., 1995). Because of low afilliative needs coupled with dominance, times of perceived threat lead to personalized leaders taking impulsive actions to protect themselves at the expense of their group (McClelland, 1975).

Organizational problem solving

Individuals employing alternative manifestations of each of these styles have been relatively successful at solving organizational problems. For example, Ronald Reagan, an ideological leader, spent time defining estrangement with the Soviet Union as a generalized, central problem for the United States (Bosch, 1988). Comparatively, charismatic leader Winston Churchill was able to motivate his British followers during WWII by providing inspirational future-looking messages regardless of Germany's continuous attacks at the onset of the Battle of Britain (Gilbert, 1991). Finally, pragmatic leader George Patton was able to tactically defeat the highly regarded German General Erwin Rommel at the Battle of Kisserine in North Africa (Hirshson, 2002). It is important to note that although each of these leaders enjoyed their share of success at defining and solving problems for their organizations, each one went about it in a markedly different manner. Reagan used his belief system of a better past to guide his dealings with the

Soviet Union, while Churchill downplayed the effects of the then-current state of affairs to keep his country focused on the future. Patton was able to discern the strengths and weaknesses of Rommel's techniques during day-to-day theatre combat. Although each engaged in problem-solving in ill-defined domains, it looks like these leadership styles reflect different ways of construing the world.

Given this observation, an important question comes to fore. How does this differing construal process apply to a) how leaders go about, and b) how successful they are at organizational problem solving (i.e., leadership)? As noted earlier, problems confronting organizations are complex, ill-defined events (Anderson, 1983). Leaders, like other individuals, are unable to work with all of the complexities or causal variables operating in such ambiguous situations (Hogarth, 1980). Instead, they tend to simplify the problem by applying a mental model (Gentner & Stevens, 1983; Johnson-Laird, 1983; Lakoff, 1987).

Mental models

A mental model is a particular type of cognitive representational system (Holyoak & Thagard, 1997). Specifically, a mental model provides a conceptual depiction of interrelationships among the goals and actions in a system that is used to a) understand the system, and b) guide responses to it (Sein & Bostrom, 1989). These mental models identify important causal events that call for action and bring about goal attainment within a system by articulating associations, or causal linkages among variables (Holyoak & Thagard, 1997; Largan-Fox & Code, 2000). Basically, leaders apply these mental

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models to make sense of organizational problems for themselves and for others when novel, ambiguous situations arise (Barsalou, 1988).

A recent study by Mumford and Strange (in press) illustrated the process that leaders may use in applying these mental models to solve organizational problems. This experimental study was intended to assess key actions in applying mental models to define complex problems by incumbents in leadership roles. In their study, 212 undergraduates were asked to assume the role of a principal asked to define and solve problems confronting a new experimental school. After reading through background information, the undergraduates were asked to prepare a speech to be given to students, parents, and teachers describing their vision for the school. One manipulation was made through the consultant's report where either good or poor models for alternative curriculum were presented. The second manipulation required participants to identify important goals in the models, important causes of performance, both, or neither. The third manipulation asked some but not other participants to reflect on their personal secondary school experiences. The resulting vision statements were evaluated by panels of students, teachers, and parents that were asked to consider affective reactions and motivation.

It was found that reflection alone contributed little to the production of motivating vision statements. However, when reflection occurred in the context of abstraction of goals and causes, higher quality vision statements were generated in problem solving. Mental models of outstanding leaders may link life experiences to important prescriptive characteristics embedded in such past cases. These cases, or complex contextualized

knowledge structures (Hammond, 1990; Kolodner, 1993; 1997), comprise the mental models leaders apply in solving organizational problems.

Available evidence indicates that these mental models are organized by a hierarchical network of past cases or experiential knowledge (Barsalou, 1988; Gentner & Stevens, 1983; Johnson-Laird, 1983; Lakoff, 1987; Murphy & Medin, 1985). Specifically, mental models are comprised of events' relationships, along with high-order goals and outcomes associated with such events. As an individual experiences events throughout life, the events are referenced against other similar experiences and encoded as exemplars, or instantiations, of more general categories (Barsalou, 1988). For example, a salient failure experience (e.g., forgetting lines in a school play) will be stored with other types of failure events. These specific and concrete experiences will be subsumed under a broad framework of "failure," or within a mental model linking such experiences. Abstract, superordinate categories (e.g., failure, public speaking) are at the top of the model while concrete experiential event-based information (e.g., forgetting lines in play) is at the bottom, serving as exemplars. Events seem to be organized in terms of categories of shared meaning (Kolodner, 1983; 1997).

This hierarchical organization of mental models is important for two main reasons (Barsalou, 1988; Anderson & Conway, 1993). First, because there is a combination of both general and specific information (Anderson & Conway, 1993; Conway & Rubin, 1993), a host of memory cues is available for retrieval and activation (Reiser et al., 1985). In other words, any one part of an ill-defined problem (i.e., concrete or abstract characteristics) can activate salient life events and accompanying rules, or lessons learned. This illustrates how mental models are used in problem solving in that they serve

functions in processing or making sense of new events by providing instantiated life narratives to facilitate causal inferences (Barsalou, 1988; Bluck & Habermas, 2000; Conway & Pleydell-Pierce, 2000).

Second, organization in terms of abstract causal coherence serves as an economic summary of life's events and how they are related, and this may be important in motivating perceptions of future problems as well as defining goals in those actions (Conway et al., 1994; Bluck & Habermas, 2000). Moreover, mental models, comprised of life narratives of conceptually related events, are not purely cognitive in nature. Instead, they seem to be experiential, or a combination of cognition and emotion, and can potentially be used to understand how people are motivated to solve problems they encounter by providing general prescriptions for actions (e.g., do not engage in public speaking) (Pillemer, 2001). The narrative structure of referent cases or experiences provides a context for past events while organizing them in a personally meaningful way. Life narratives come to serve directive functions (Pillemer, 1998), providing life lessons in episodic form used to define goals and actions in present (Baumeister & Newman, 1994).

Events used to construct such life narratives should determine how a leader defines problems because new situations are interpreted and appraised in terms of consequences for that leader (Poper, 2000; Poper & Mayseless, 2002), and life narratives provide one means of assessing such outcomes. Specifically, new events, particularly complex, ill-defined events, will be referenced against exemplars of mental models, or life narratives instantiated by salient events experienced (Reiser et al., 1985). In the absence of general rules or guidelines for behavior, memories of specific events carry

valuable, contextualized information about how things might work in novel settings (Pillemer, 1992; 2001; Schank, 1980; Tulving, 1983).

Event types. While it is probable that life events shape the nature of the mental models constructed by outstanding leaders, the intent of this study is more specific. How can differences in the events used in constructing life narratives be used to describe the differences between charismatic, ideological, and pragmatic leaders? One way leaders, and the mental models they employ in problem solving, may differ is due to the types of events instantiating their life narratives (McAdams, 2001; Pillemer, 2001; Singer & Salovey, 1993). Events that are especially vivid, consequential, and affectively charged are instrumental in self-definition (Singer & Salovey, 1993). Basically, certain events endow more lessons learned, integrative themes, and personal meanings than others (McAdams, 1985; 2001). Pillemer (1998; 2001) and McAdams (2001) have argued that a number of different kinds of life events may be used in the construction of life narratives: 1) originating events, 2) turning points, 3) anchoring events, 4) analogous events, 5) redemptive events, and 6) contaminating events.

Originating events, or experiences that mark the beginning of a career path, come to be tied to long-term goals and to an implicit plan of action for meeting those goals (Pillemer, 1998; 2001). These experiences are viewed as integral to shaping downstream outcomes in individuals' lives, and they continue to command attention and evoke strong emotions. Relatedly, turning points are concrete episodes that suddenly revise a life direction. Although they tend to alter previously held plans, turning points are similar to originating events in that they become tied to future goals and motivate actions. These

two types of events promote inferences of causality in that they are tied to life choices that followed their occurrences (Conway & Pleydell-Pierce, 2000).

While originating and turning points events mark the beginning of a new life plan, anchoring events provided an instantiated foundation for a belief system. The resulting mental model serves as an enduring reminder of how the world works and one's place in it (Pillemer, 2001). Anchoring events contain signals of what is to be valued and warnings of what is to be avoided. Retrieval of such experiences from memory continually grounds beliefs and values. Analogous events occur when a present circumstance triggers a memory of a structurally similar past event, which then may inform current decisions. This type of event has some structural similarities to old events. Lessons or directives from these types of events seem to reoccur throughout life, reminding a person of what to do or what not to do based on previous experiences (Schank, 1990). For example, a particularly salient event of a person getting caught cheating may be activated each time the person is tempted by taking a short cut (Pillemer, 2001). Following from that, analogous events may be more evident later in life when there is a richer database or more instantiations of life directives readily available for analogical reasoning processes.

McAdams (2001) added to these four types of events by delineating two other categories that are important components of life narratives. Redemption events, or negative events that are later viewed to have had a positive life impact, also serve as motivational mechanisms for guiding decisions. They may provide individuals with mental models that bad situations can be turned around to have positive outcomes. Conversely, contaminating events are experiences that seemed to have emotionally

positive attributes and then later went suddenly wrong. These once-positive events tend to have negative downstream consequences and serve as potent reminders of failure.

Mumford and Manley (2003) have argued that differences among leaders in the types of events used to construct life narratives may lead to differences in the mental models constructed, and therefore, differences in the behaviors arising from applications of such mental models to solve organizational problems. Leaders tend to reflect on problems confronting their organization and reference them against past experiences to identify key causal events (Hambrick & Mason, 1984). Given these applications, it seems likely that different types of events would give rise to markedly distinct leadership styles. For example, ideological leaders stress the importance of transcendent goals. Because anchoring events tie long-term goals to principles of belief systems, it follows that these types of events should frequent the life narratives of ideological leaders. Similarly, due to the future orientation of charismatic leaders, originating events may be viewed as a salient experience shaping their lives. Since redemptive events instantiate a mental model with events of turning a bad situation into a positive one, it is likely that these types should also predominate a charismatic's life narrative. Pragmatic leaders, given their focus on the present, seem more inclined to emphasize turning points and analogous events, since both require the adaptation to changes in one's environment. Finally, it is likely that leaders with personalized orientations will have experienced numerous contaminating events, making demoralization and failure salient components of life narratives that could be used to process new events (Erikson, 1968). These observations point to the following two hypotheses:

H_1: Charismatic, ideological, and pragmatic styles of outstanding leadership will be associated with different types of life defining events.

H_2: Personalized and socialized orientations within the three styles of outstanding leadership will be associated with different types of life defining events.

Event content. Although types of events that comprise a life narrative are important for understanding the mental models of outstanding leaders, inferences will be augmented by the inclusion of thematic information about the content as well as the structure (Pillemer, 2001). The thematic underpinnings, or content, of events may be just as important as identifying the event types in terms of understanding their effects on leadership problem solving styles. Thematic similarity, or common event content, has been assessed by rating life narratives for basic motives such as need for power and need for intimacy (McAdams, Diamond, Aubin, & Mansfield, 1997; Singer & Salovey, 1993). McAdams and colleagues (1982; McAdams, Hoffman, Mansfield, & Day, 1996) have conducted a series of studies that showed that the content of life narratives is especially relevant for identifying individual differences in personal goals and motives, coping strategies, values and beliefs, and domain-related skills and interests. It follows then that such content differences should be helpful in distinguishing leadership styles as well.

H_3: Event content of charismatic, ideological, and pragmatic styles of outstanding leadership will differ.

H_4: Event content of personalized and socialized orientations within the three styles of outstanding leadership will differ.

Method

Sample

To examine the types and content of experiences of outstanding leaders, a sample of 120 historically notable leaders was used. Given the intent of the present study, specifically to distinguish developmental experiences of charismatic, ideological, and pragmatic leaders, the individuals included in this sample were selected because they manifest a charismatic, ideological, or pragmatic style. Additionally, to examine orientation, socialized versus personalized (House & Howell, 1992), half of the leaders selected within each type were chosen because they display a socialized orientation while the remaining half of the leaders selected within each type were chosen because display a personalized orientation. Thus, 20 leaders were selected for examination in each of the following categories: 1) socialized charismatics, 2) personalized charismatics, 3) socialized ideologues, 4) personalized ideologues, 5) socialized pragmatics, and 6) personalized pragmatics. Table 1 provides a list of leaders included in the present set of studies listed by category assignment.

There are four important characteristics of this sample. First, 120 was not an arbitrary number. Instead, the size of this sample was specified to provide sufficient power to detect differences among charismatic, ideological, and pragmatic leaders taking into account the demands made by content coding. Second, the sample applied was restricted to 20th century leaders due to the need for objective, verifiable biographical material—typically, biographies written prior to this period were subject to less rigorous evaluation. Third, use of 20th century leaders was attractive because while time was available to fully assess the outcomes of the leaders' efforts, leadership could still be

examined in the context of modern institutional settings. Fourth, an attempt was made to include in this sample leaders working in different fields (e.g., business, politics, non-profit organizations, and the military). No attempt was made, however, to ensure equal representation of leaders drawn from different domains in the six categories under consideration due to the tendency of charismatic, ideological, and pragmatic leaders to gravitate to different organizations (Weber, 1924). Nonetheless, an attempt was made to ensure that each category under consideration included leaders drawn from multiple fields.

Leader identification procedures involved a number of steps. Initially, a list of candidate leaders was developed. Development of this list began with a review of general history texts and biographical web sites to identify historically notable 20th century leaders for whom at least one "academic" biography was available. Thus, leaders who had only been only reviewed by the "popular" press were not considered for inclusion in this study. In initial formation of the candidate list, an attempt was made to draw leaders from multiple fields. Preference was given to leaders for whom multiple biographies were available because a) the availability of multiple biographies provided additional evidence of the impact of the leader, and b) the availability of multiple biographies allowed for the selection of biographies providing material appropriate for the present set of investigations. Application of these procedures resulted in the identification of 221 20th century leaders who were plausible candidates for inclusion in the sample.

Once the pool of 221 candidates had been identified, it was necessary to screen this over-selected group in an attempt to include only prototypic members for each of the six leadership styles. This screening began with the assignment of leaders to the

categories under consideration. To classify leaders with respect to orientation, socialized versus personalized, the criteria suggested by O'Connor, Mumford, Clifton, Gessner, and Connelly (1995) were applied. More specifically, three psychologists were asked to review the summary material obtained from the text and web site searches. Based on this material, judges, all doctoral candidates in industrial and organizational psychology, were to classify a leader as socialized if they initiated action for the betterment of people, society, or institutions regardless of personal consequences (e.g., Gerald Ford), or as personalized if they initiated action to acquire, maintain, and enhance power (e.g., Joseph McCarthy).

These judges were also asked to classify leaders, based on this behavioral material, as charismatic, ideological, or pragmatic. In accordance with the observations of Strange and Mumford (2002), a leader was classified as charismatic if they articulated a vision based on perceived social needs and the requirements for effective, future-oriented change (e.g., J.P. Morgan). A leader was classified as ideological when they articulated a vision based on strongly held personal beliefs (e.g., Ronald Reagan). Mumford and Van Doorn's (2001) study was used as a basis for identifying pragmatic leaders with leaders being classified as such if their efforts were focused on the solution of immediate social problems (e.g., Benjamin Franklin).

Application of these criteria resulted in the three judges agreeing on more than 70% of their assignments of a leader to one of the six categories. In cases where the judges disagreed in their assignments to a category, the leader was dropped from the candidate list. This point is of some importance for two reasons. First, by dropping cases where there was disagreement, the sampling plan applied herein efficiently prohibited

examination of mixed-type leaders (e.g., leaders evidencing both charismatic and ideological behavior). Second, by dropping cases where there was disagreement, it became unattainable for the present effort to say much about alternative pathways to outstanding leadership outside the charismatic, ideological, and pragmatic pathways of concern herein.

To further reduce this candidate list, the three judges were asked to review the available descriptive material pertaining to the leaders falling into the six categories under consideration (e.g., socialized and personalized charismatic, ideological, and pragmatic leaders). The final set of leaders to be examined was determined through application of the following criteria: 1) the volume of biographical material available for the leader, 2) representation of multiple fields (e.g., business, politics, non-profit organizations, the military) in each category, 3) representation of non-western leaders, and 4) representation of women.

Application of these criteria led to the final list of leaders to be examined—the list presented in Table 1. Given the conditions influencing access to leadership roles throughout most of the 20th century, it is not surprising that the majority of the leaders included in this sample were men. Nonetheless, a few women were identified who could be included in the sample. In examining the leaders assigned to the charismatic, ideological, and pragmatic categories, another noteworthy trend is important. More specifically, political and non-profit leaders tend to be found in the ideological category, and business leaders tend to be found in the pragmatic category, while a rather diverse group of leaders, with respect to field of endeavor, tend to be found in the charismatic category. Given earlier observations as to the behaviors these leaders use to attract

followers (e.g., ideologues seem to exclude those that do not share their beliefs), this pattern of assignments is not surprising and provides some evidence pointing to the validity of this sampling procedure.

Some further evidence bearing on the meaningfulness of the sampling procedures applied, and assignment of leaders to the categories under consideration, may be obtained by comparing the leader assignments made in the present study with those made in earlier studies by O'Connor, Mumford, Clifton, Gessner, and Connelly (1995) and Strange and Mumford (2002). Bearing in mind the point that these earlier studies did not consider pragmatic leaders, it is evident that a fairly high degree of overlap emerged with respect to leader assignment to either the socialized or personalized charismatic categories or the socialized or personalized ideological categories. This convergence in assignments of leaders to categories provides some evidence pointing to the validity, or meaningfulness, of the selection and assignment process applied in the present set of studies.

Biography Selection

The historic data that provided the basis for the present study was drawn from biographies describing the early life and careers of the selected leaders. Because these biographies provided the data used as a basis for content coding, careful attention was given to the selection of appropriate biographies. Identification of the biographies used in the various content analyses was carried out through application of the following procedures.

Initially, a reference search was conducted to identify biographies published describing each of the selected leaders. Although in a few cases (less than 10% of the total sample) only one biography was available, in most cases a number (3 or more)

biographies were available describing the careers of the selected leaders. When multiple biographies were available, a web search and a library search were conducted to obtain reviews of the available biographies. Any biography that received unfavorable scholarly reviews, particularly with respect to the comprehensiveness and accuracy of the material presented, was eliminated.

The reviews available for the remaining biographies were then examined to identify the two or three biographies that appeared to provide the best available descriptions of the leader's life and career. These more promising biographies were obtained and reviewed by three psychologists with respect to the following five criteria: 1) did the biography stress accurate and detailed reporting of the leader's behavior and key events he or she encountered over the course of his or her career? 2) did the biography expressly focus on behaviors of concern with respect to development? 3) did the biography provide a reasonably detailed account of the leader's early life? 4) did the biography provide a clear and reasonably objective summary of the leader's accomplishments? and, 5) was there evidence of adequate scholarly work as indicated by citations provided and sources examined? Of the available biographies, the biography that best satisfied these five criteria was retained for use in the various content analysis studies.

Appendix A presents the citation list for the biographies applied in the present set of investigations. The majority of the biographies (more than 75%) had been published within the last 25 years. A typical biography was over 500 print pages with numerous biographies had more than 600 pages of text. Most biographies presented this material in 15 to 20 chapter segments with these chapters averaging 30 to 40 pages in length.

Materials

Biographies, like other forms of archival records, provide a rich, albeit complex, source of descriptive data. As a result, the successful use of this material in various content analyses will depend, at least in part, on the procedures used to draw early life and career events from this large, complex body of material. Selection of material to be applied in this study proceeded in two distinct steps. First, the chapters from which relevant behaviors or events were to be drawn were identified. Second, procedures were developed for identifying and sampling events within these chapters.

Chapter selection. This effort is concerned with identifying the kind of early experiences shaping the life narratives, and thus the underlying content of mental models applied by, outstanding leaders. Because the available evidence indicates that people begin constructing life narratives in late childhood or early adolescence (Habermas & Bluck, 2000), it seemed clear that the chapters detailing the leader's early life and career before they began their rise to power, should be applied in this study. Therefore, chapters were selected that contained detailed descriptions of salient events experienced early in life to rise to power. Typically, three to six chapters (46 total average pages) were identified for each leader. A few leaders, less than ten percent of those in this study, had substantially more pages of text (94 total average pages) devoted to early life and career experiences. These differences in material length provided by various biographies were taken into account when applying covariate control measures in all analyses, however.

Another set of comparisons to be made among outstanding leaders concerned their performance. Although performance relevant information may be gleaned from many of the chapters included in biographies, this information is typically presented most

succinctly in summary form in the prologue or epilogue chapters. Application of the prologue or epilogue chapters, the "summary" chapters, avoided the problems posed by drawing predictor information (e.g., developmental events) and criterion information (e.g., number of institutions established) from the same chapters. Accordingly, only the information presented in the summary chapters was used to contrast charismatic, ideological, and pragmatic leaders with respect to performance.

Coding

Identifying events. Identification of life events to be used required application of a rather elaborate set of procedures in event identification to permit subsequent comparison of charismatic, ideological, and pragmatic leaders with respect to the kind of events involved in the formation of life narratives. Here four undergraduates, unfamiliar with the intent of the present study, received a sixteen-hour training program, extended over two weeks, where they were taught how to identify and abstract key life events. This training program began by familiarizing these undergraduates with the definitions of the six types of life events under consideration: 1) originating events, 2) anchoring events, 3) analogous events, 4) turning point events, 5) redemptive events, and 6) contaminating events (Pillemer, 2001; McAdams, 2001). Subsequently, they practiced identifying these events using the early life and career chapters drawn from five biographies. Feedback was provided concerning identification of events, classification of events, and discrimination of event types. This practice continued until these undergraduates reached an 80% agreement criterion with respect to both event identification and event classification.

Following training, these undergraduates were asked to review the early chapters applying to the 120 leaders under consideration in the present set of studies. They were asked to identify and abstract any events falling into the six event categories under consideration and classify the event into *one* of these six categories using benchmarks of actual events from leaders in the study. The benchmark material used to abstract these events is presented in Table 2. An examination of the reliability of these classifications, using a kappa index, indicated that adequate interrater agreement coefficients were obtained; originating events ($r = .89$), anchoring events ($r = .75$), analogous events ($r = .98$), turning point events ($r = .92$), redemptive events ($r = .64$), and contaminating events ($r = .78$). Typically, these events were a half to one page in length with 15 to 30 events across categories being identified for each leader. Approximately 1,400 events total were identified across the 120 leaders in this study. These event abstracts provided the material used in content coding.

Coding event content. The material describing salient events (Pillemer, 2001; McAdams, 2001) provided a basis for the analysis of event content. A similar set of general procedures was applied in rater training. Initially, six judges were recruited who were a mix of undergraduates and graduate students pursuing degrees in psychology. Prior to the start of the content analysis study, the judges participating in this effort were required to complete a two-week training program involving twelve hours of instruction. In this training, the judges were familiarized with the nature of the stimulus material—the developmental events abstracted from the biographies that would be used in coding. Subsequently, they were presented with definitions of the dimensions on which this material would be evaluated.

These dimensions reflected various constructs that are relevant to the problem definition and solving styles of both personalized and socialized charismatic, ideological, and pragmatic leaders. A comprehensive literature review was conducted to identify characteristics of such leaders that distinguish them from each other. Initially, sixty-three dimensions were identified. These were then reviewed for redundancy and clarity, and twenty-eight were retained for this study. After identifying these dimensions, behavioral benchmarks were generated to further define each one. For example, for the dimension of *injustice* (Post, Ruby, & Shaw, 2002), objective examples of this construct included: 1) the presence of unfair conditions for a group, 2) marked income disparity between groups, 3) group feels indebted to society for past wrongs, and 4) lack of meaningful work opportunities for a group. A list of these constructs, their behavioral examples, and their justification for inclusion can be found in Table 3.

These similarities and differences between the various dimensions under consideration in were discussed then discussed in rater training. Once the judges had been familiarized with the dimensions and their behavioral manifestations, they were presented with the procedures to be applied in the content analysis. Broadly speaking, these instructions required judges to read through the material abstracted to describe an incident of leader behavior or experience.

After reading each event, judges then engaged in a modified Q-Sort procedure to assign relevant dimensions to events (Brown, 1980). The Q-Sort applied was unstructured, in that there was no attempt to ensure uniform assignment of each construct to events (McKeon & Thomas, 1988). Specifically, judges were instructed to read each event and then assign *any number* of relevant dimensions that best reflected underlying

thematic content (see McAdams, 1982; McAdams, Hoffman, Mansfield, & Day, 1996; Woike, 1995 for other examples of identifying themes manifested in life stories). This unstructured assignment of dimensions meets assumptions required for normal multivariate analyses. Each event will have a Q-Sort array delineating relevant constructs that reflect its content. In addition, each leader will have a number of Q-Sort arrays, depending on the number of events identified for that individual.

Judges were asked to evaluate only the event standing alone when making assignments of constructs in the Q-Sort, however. Specifically, each rater was required to make a judgment of "reflects content" versus "does not reflect content" for all 28 dimensions for each event they observed. These events were recorded on standard coding sheets and later tabulated by an independent researcher.

Following dimension training, the judges were presented with a sample of biographical material abstracted from the pertinent chapters. They were asked to evaluate this material using the Q-Sort procedures. After making their own independent ratings, the judges reconvened as a panel to compare their assignments and discuss any observed discrepancies. At this time, feedback was provided to clarify dimensional definitions and application of the Q-Sort procedures. These practice sessions continued until the judges evidenced adequate agreement—an average kappa interrater agreement coefficient above .70.

In making ratings, judges were presented with a binder containing a subset of the relevant stimulus materials abstracted from the biographies. The stimulus material contained in a binder was structured in such a way that it contained material drawn from multiple biographies where the leader involved in the incident was not expressly

identified. Moreover, material applying to a given leader was distributed across binders. These steps were taken to minimize potential set and evaluative biases. These binders were rotated across judges so that different judges evaluated different material at different levels of practice.

Application of these procedures resulted in adequate interrater reliability coefficients when judges were making their assignments. Using three judges, these procedures produced interrater agreement kappa coefficients ranging from .56 to .63. Agreement coefficients of this magnitude are typically considered adequate given the number of categories applied and the use of the kappa statistic. A consensus score was then obtained for each event by assigning constructs to events where a majority of raters agreed on initial assignment. In calculating leader scores, the number of assignments to a particular dimension across all events resulted in that dimension score for the leader (e.g., a total injustice score). To control for cross-leader differences in number of events, this score was divided by the number of events for each leader to result in a final, standardized score for each leader on each of the 28 dimensions. This final score provided the basis for all leader content analyses.

Controls. In addition to the identification of critical developmental events, supplemental material was also obtained as part of this study. These measures were intended to provide requisite controls with respect to the inferences being drawn. A set of general controls was obtained in order to monitor threats to internal validity endemic to all types of archival research. The first set of covariate control measures was intended to take into account temporal, cultural, and historic effects. Thus, the following control measures were obtained through judgmental evaluations: 1) was the leader a pre- or post-

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World War II leader? 2) was the leader from a western or non-western country? 3) was the leader's country industrialized or non-industrialized? and 4) was the leader's biography translated into English? The second set of control measures examined attributes of the leader and their role: 1) type of leadership role (e.g., business, political, non-profit organization, military), 2) political conflict in the leader's organization, 3) years in power, and 4) elected or appointed versus leadership positions seized by force.

In addition to these general controls, a select set of control measures was formulated bearing on the inferences to be made from developmental events obtained in this study. These types of control measures were obtained in reference to specific threats to the quality of studies examining early developmental events and included: 1) presence of theoretical assumptions about the nature of developmental influences (Freudian, educational, et cetera), 2) amount of information available or detail about developmental events, 3) number of developmental events abstracted, 4) length of developmental events, 5) number of pages devoted to developmental period, 6) age at rise to power, 7) amount of external documentation provided for developmental events, 8) source of external information about developmental events (teachers, siblings, friends, et cetera), and 9) number of leader recollections used as a basis for describing developmental events.

The rating scales and counts applied in evaluating the biographies with respect to these control variables necessarily varied as a function of the question under consideration. Some ratings and counts reflected overall evaluations drawn from the summary chapters. Other ratings and counts, however, were obtained as part of the content coding of relevant descriptive material (e.g., event length). Because these covariate control measures, regardless of the measurement scales applied, tended to focus

on relatively objective events, it was not surprising that they proved to be reasonably reliable. The average interrater reliability coefficient, obtained using the procedures suggested by Shrout and Fleiss (1979), was .94.

Criteria. Differences in the performance of charismatic, ideological, and pragmatic leaders may be related to the mental models they tend to apply when solving organizational problems. Prior studies, furthermore, have indicated that marked differences in performance are commonly observed in studies contrasting socialized and personalized leaders (O'Connor, Mumford, Clifton, Gessner, & Connelly, 1995). To examine cross-type differences in performance, and examine how various aspects of leader behavior being assessed in the content analyses were related to performance, a set of criterion, or outcome, measures were drawn from the summary chapters presented in the various biographies under consideration.

Based on the earlier findings of Strange and Mumford (2002), twelve general criterion measures were drawn from these summary chapters intended to provide an overall appraisal of performance with respect to social impact. The first five criterion measures, all based on the biographers' observations, were counts examining: 1) the number of positive contributions made by the leader, 2) the number of negative contributions made by the leader, 3) the number of different types of positive contributions made by the leader, 4) the number of different types of negative contributions made by the leader, and 5) the number of institutions established by the leader. In addition to these counts of points mentioned, a psychologist was asked to rate seven additional criteria based on the material presented in the summary chapters. These ratings, made on a 5-point scale, examined: 6) how much did the leader contribute to

society? 7) how long did these contributions last? 8) how many people did the leader affect? 9) did the leader initiate mass movements? 10) was the leader's agenda maintained when they left power? 11) were institutions established by the leader still in existence? and 12) what was the biographer's evaluation of the leader?

The reliability of these outcome assessments was established in a small-scale study. In this study, three judges, all doctoral candidates in industrial and organizational psychology, were asked to evaluate the performance of 18 leaders using the aforementioned scales and the information presented in the relevant summary chapters. Using the procedures suggested by Shrout and Fleiss (1979), an average interrater agreement coefficient of .83 was obtained across the 12 rating scales under consideration. In a second study, intended to provide some evidence for the validity, or meaningfulness, of these evaluations, a second, high quality biography was obtained for 5 leaders. The outcome evaluations derived from the summary chapter presented in this second biography were contrasted with the outcome evaluations derived from the summary chapters presented in the first biography. The agreement coefficient obtained in this comparative analysis was 84%. Thus, some evidence is available for the convergent validity of these evaluations across biographical sources.

Analyses

In order to contrast leaders on types of life defining developmental events they have experienced, chi square frequency analyses were applied. In addition, several correlation analyses were conducted to examine the association between thematic dimensions identified in the biographies. Taking into account potential covariate controls,

an examination of the contrasting content of these events between groups of outstanding leaders, a multiple analysis of covariance (mancova) were conducted.

According to variance identified in the mancova, a set of discrimnant function analyses were also conducted on important classification variables and the thematic dimensions. Significant functions will then be correlated with and regressed upon the 12 criteria to examine the relationships between the recurring themes found in life events and indices of performance important to outstanding leadership.

<center>Results</center>

Types of Events

Table 4 illustrates the relationships obtained in the correlational analysis between the types of events found in the biographies of outstanding leaders. There were no significantly correlated relationships between the six event types, demonstrating the associational independence among originating events, turning point events, anchoring events, analogous events, redemption events, and contaminating events. In other words, these six event types seem to capture remarkably distinct categories of life experiences, providing some validity evidence for the inferences drawn from such models of adult development (McAdams, 2001; Pillemer, 1998; 2001).

Further analyses of association revealed that, in support of hypotheses 1 and 2, the events in this taxonomy were differentially associated with leader orientation and type. Before contrasting leaders in this regard, it is useful to talk about the frequency in which these event types were identified. Originating and anchoring events, were identified most frequently in the biographies (n = 304, 431, respectively). As expected, turning point, redemption, and contaminating events appeared less frequently than anchoring and

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originating events, although they did appear with some frequency in the early portions of leader biographies (n = 174, 206, 231, respectively). Analogous events appeared less frequently, however (n = 19). This low number of identifications could be due to the fact that the present study is focused on the early development of life narratives—a time period when relatively few complex analogues are likely to be experienced by leaders. Because so few of these types of narrative events were identified in this study, the remaining portion of the results will focus on the differences among leaders with respect to originating, anchoring, turning point, redemption, and contaminating events.

Table 5, resulting from the first chi-square analysis, presents the contrast of socialized and personalized leaders with respect to the frequency different types of life events ($\chi^2_{(5)}$ = 19.56, $p \leq .01$). As expected, contaminating events were observed more frequently in the biographies of personalized leaders (n = 147 versus n = 117), while redemption events were observed more frequently in the biographies of socialized leaders (n = 127 versus n = 79). It seems likely that disappointment and humiliation result in the construction of negative life narratives while earned success, often success attributed to the help of others, results in a more positive, prosocial world view (Gessner, O'Connor, Clifton, Connelly, & Mumford, 1993).

Socialized and personalized leaders also differed with respect to the amount of anchoring events they had. Specifically, socialized leaders experienced more anchoring events, or experiences that shaped their belief systems, than personalized leaders (n = 236 versus n = 195). These findings suggest early experiences that shape a strong internal value system may be an important set of precursors to the development of ethical treatment of others later in life.

Table 6 details the frequency of event types across the biographies of charismatic, ideological, and pragmatic leaders. A chi-square analysis revealed significant contrasts among these leader types with respect to the events they experienced ($\chi^2_{(10)} = 51.58$, $p \leq$ .001). Specifically, during the period where charismatic, ideological, and pragmatic leaders are forming life narratives, available biographies report differing amounts of redemption event, anchoring events, turning point events, and originating events.

Ideological leaders, consistent with their influence of beliefs and values in decision-making, were more likely to encounter anchoring events during the period of life narrative formation than charismatic and pragmatic leaders (n = 206 versus n = 113). Following from an early steadfast commitment to beliefs, ideological leaders were less likely to be influenced by turning point events, or life redirecting events, than the more malleable charismatic leaders (n = 47 versus n = 71). Ideological leaders also experienced less redemptive events than charismatic and pragmatic leaders (n = 56 versus n = 74). This pattern of findings suggests that ideological leaders, in contrast to charismatic and pragmatic leaders, remain on a fixed path—a path anchored by belief shaping events.

Charismatic leaders were more likely than ideological and pragmatic leaders to be exposed to turning point events (n = 71 versus n = 52). These types of experiences may play a role in shaping the mental models of charismatic leaders in that they provide concrete evidence for the value of initiating change events, a common strategy employed by charismatic leaders (Shamir, House, & Author, 1992). Pragmatic leaders differed from charismatic and ideological leaders (n = 114 versus n = 95) in that they were more likely to evidence exposure to originating events. These types of events come to be tied to long

term plans and goals, which are critical to the activities characteristic of pragmatic leaders solving complex problems in social domains (Mumford & Van Doorn, 2001).

This pattern of results should be interpreted in light of the significant experienced ($\chi^2_{(25)}$ = 93.02, $p \leq .001$) chi-square obtained when examining the frequency of event experienced across the orientation and type variables. Specifically, Table 7 illustrates that this interaction can be summarized by three main conclusions. First, following from the foregoing observations, socialized ideologues were most likely to evidence exposure to anchoring events (n = 114 versus n = 63.4). Personalized pragmatic leaders were conversely least likely to be exposed to anchoring events (n = 41 versus n = 78), suggesting that opportunism resulting from the lack of internal value anchors may often account for the calculated destructiveness on the part of personalized pragmatic leaders.

Second, personalized ideologues were less likely than other leaders to evidence exposure to redemptive events (n = 19 versus n = 37) during the period of narrative formation. This lack of exposure to redemptive events may make it difficult for ideological leaders, who tend to be steadfast in their beliefs, to be capable of envisioning a better future. Moreover, it could facilitate in the adoption of a rigid, aggressive ideological stance to return their group's conditions to the past state of greatness by any means.

Third, following from this observation, personalized ideologues were less likely than other leaders to evidence exposure to turning point events (n = 18 versus n = 31). More importantly, personalized charismatics were more likely to evidence exposure to more turning point events than those to which other leaders were exposed (n = 42 versus

n = 26.2). It seems that there is a threshold of change events that leaders can take; very high levels of life instability lead charismatics to adopt a personalized orientation.

Event Content

   Correlations. Upon the examination of variation in the exposure to the six event types involved in life narrative formation, the remainder of the results section will focus on the thematic content of these events. Table 8 presents the means, standard deviations, and correlations among the 28 thematic dimensions used to code these events. As expected in a sample of outstanding leaders, formative life events were likely to evidence themes of power ($\overline{X}$ = 10.91, *SD* = 18.53). Themes of turbulence also appeared often in these leaders' life shaping events. For example, themes related to conflict ($\overline{X}$ = 13.96, *SD* = 18.50), uncertainty ($\overline{X}$ = 10.01, *SD* 13.96), and injustice ($\overline{X}$ = 13.16, *SD* = 16.70) suggest that outstanding leaders develop in an unstable, conflict-rich environment where they begin to form strong beliefs about the way the world works ($\overline{X}$ = 13.56, *SD* = 17.70). The prevalence of these themes is not surprising given that leaders tend to emerge from turbulent conditions (Erikson, 1968).

   Of greater use for understanding differential styles of leadership is the pattern of relationships resulting from the correlations among the thematic dimensions. The first important finding is the magnitude of these relationships was not large enough to warrant further aggregation. Thematic dimensions linked to a specific leadership orientation (i.e., socialized or personalized leadership), however, did display expected positive correlations. For example, negative view of others, negative view of self, power motives, negative life themes, and self focus, constructs historically associated with personalized leaders (O'Connor, Mumford, et al., 1995; House and Howell 1992), evidenced strong

positive relationships with each other in the present study ($\bar{r}$ = .48). Along similar lines, socialized orientation events themes of positive view of others, positive view of self, commitment to others, and exposure to suffering were positively correlated with each other as well ($\bar{r}$ = .42).

In keeping with this line of results, event themes theoretically linked to a given leadership type, for example the themes derived from examination of literature on charismatic leaders, also showed a unique pattern of relationships. Themes linked to charismatic leadership, such as focus on future conditions, inspirational communication, and image management, evidenced positive correlations ($\bar{r}$ = .22). Thematic dimensions related to ideological leadership, for example themes of spirituality, environmental conflict, belief commitment, and injustice, resulted in strong positive correlations ($\bar{r}$ = .28). It is also important to note that these ideological themes evidenced virtually no relationship with themes related to charismatic leadership ($\bar{r}$ = .00). Events laden with analysis, a preference for concrete evidence, incremental progress, and exposure to diverse people and ideas, all dimensions associated with pragmatic leaders, displayed the expected positive relationships ($\bar{r}$ = .46). Again, however, these themes were not strongly related to themes linked to charismatic or ideological leadership. In addition, the thematic dimensions associated with charismatic, ideological, and pragmatic leadership were not associated with the themes linked to socialized or personalized orientations ($\bar{r}$ = .02). This pattern of findings provides some evidence for the convergent and divergent validity of the scores reflecting the thematic content of the life events extracted from leader biographies.

Comparison of leadership styles. The presence of these coherent, meaningful thematic dimensional relationships points to the importance of another question—how do the various leader styles differ on these dimensions? Tables 9, 10, and 11 present the results from the mancova examining differences across leader orientation (personalized and socialized) and leader type (charismatic, ideological, and pragmatic) with respect to the occurrence of the various thematic dimension in important life events, and they support hypotheses 3 and 4. None of the various covariate controls yielded significant ($p \geq .05$) impact on the outcomes, which could suggest that conclusions drawn about orientation and type were not influenced by potential confounds such as cross-biography differences in sources and detail.

The mancova revealed that the orientation variable provided a significant main effect ($F_{(28, 114)} = 3.43$, $p \leq .001$). Examination of the univariate effects indicated that socialized leaders were exposed to life events that would build an ethical dedication to others. Specifically, socialized leaders evidenced more themes of commitment to others ($F_{(1, 114)} = 15.40$, $p \leq .001$, $\overline{X} = 15.80$, $SE = 1.84$ versus $\overline{X} = 5.55$, $SE = 1.84$), positive view of others ($F_{(1, 114)} = 6.64$, $p \leq .01$, $\overline{X} = 11.58$, $SE = 1.64$ versus $\overline{X} = 5.59$, $SE = 1.64$), and inspirational communication ($F_{(1, 114)} = 4.65$, $p \leq .05$, $\overline{X} = 10.39$, $SE = 1.36$ versus $\overline{X} = 6.23$, $SE = 1.36$) than themes evidenced by personalized leaders. It seems that socialized leaders encounter events stressing the importance of prosocial behavior at early points in their lives.

The development of such a socialized orientation is more complex than the foregoing pattern of findings may lead one to discern, however. Socialized leaders, as opposed to personalized leaders, are more likely to have experienced events characterized

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by an exposure to injustice ($F_{(1, 114)}$ = 7.72, $p \leq .01$, $\overline{X}$ = 17.31, SE = 2.11 versus $\overline{X}$ = 9.00, SE = 2.11) and exposure to others' suffering ($F_{(1, 114)}$ = 14.34, $p \leq .001$, $\overline{X}$ = 11.68, SE = 1.61 versus $\overline{X}$ = 3.02, SE = 1.61). Evidentially, socialized leadership emerges not only from commitment to others, but also from an empathetic understanding of the human condition—socialized leaders, because of their acute exposure to pain experienced by others arising from unfair conditions, may develop a sensitivity or compulsion to make right with their own relationships later in life.

While these findings offer new insight into the nature of socialized leadership, a set of historically supported themes emerged in the background of personalized leaders. For example, the events evidenced in the lives of personalized, as opposed to socialized, leaders were indicative of themes of self focus ($F_{(1, 114)}$ = 9.79, $p \leq .01$, $\overline{X}$ = 12.31, SE = 1.71 versus $\overline{X}$ = 4.71, SE = 1.71), negative view of others ($F_{(1, 114)}$ = 31.08, $p \leq .001$, $\overline{X}$ = 22.86, SE = 1.99 versus $\overline{X}$ = 7.16, SE = 1.99), negative life themes ($F_{(1, 114)}$ = 14.82, $p \leq .001$, $\overline{X}$ = 10.08, SE = 1.36 versus $\overline{X}$ = 2.63, SE = 1.36), power motives ($F_{(1, 114)}$ = 24.46, $p \leq .001$, $\overline{X}$ = 18.28, SE = 2.10 versus $\overline{X}$ = 3.55, SE = 2.10), and uncertainty ($F_{(1, 114)}$ = 2.79, $p \leq .10$, $\overline{X}$ = 12.12, SE = 1.77 versus $\overline{X}$ = 7.92, SE = 1.77).

In addition, personalized leaders were less likely than socialized leaders to be privy to the importance of careful analysis of problems ($F_{(1, 114)}$ = 5.60, $p \leq .05$, $\overline{X}$ = 9.33, SE = 2.00 versus $\overline{X}$ = 16.03, SE = 2.00) and fact-finding ($F_{(1, 114)}$ = 7.29, $p \leq .01$, $\overline{X}$ = 6.25, SE = 1.94 versus $\overline{X}$ = 13.67, SE = 1.94) when learning other life lessons. This could demonstrate why personalized leadership has been historically associated with poor performance (O'Connor, et al., 1995). These results closely align with findings that

personalized leaders tend to evidence a narcissistic self importance coupled with cavalier disregard for the others' well-being (O'Connor, Mumford, et al., 1995). Following from that, these delusions of grandeur and drive to subvert others may have been originally activated by uncertainty about one's place in the world.

The discrimnant function comparing socialized and personalized leaders on these thematic dimensions was significant ($p \leq .001$), and it resulted in a canonical correlation of .71. The upper portion of Table 12 illustrates that socialized and personalized leaders can be discriminated based on the themes they encounter throughout their early life experiences. This finding is important because it lends support to the possibility that life narratives play an important role in shaping a leader's orientation towards others. The thematic dimensions resulting in the highest loadings on this function were negative view of others ($r = -.50$), power motives ($r = -.42$), commitment to others ($r = .35$), exposure to others' suffering ($r = .34$), and negative life themes ($r = .33$). This pattern of loadings, emphasizing thoughts about and reactions to others, was labeled *Interpersonal Concern*. As might be expected based on earlier observations, socialized leaders ($\bar{X} = 1.01$) scored higher on this function than personalized leaders ($\bar{X} = -1.01$) scored.

A significant main effect ($F_{(28, 114)} = 2.52, p \leq .001$) was also found for the leader type variable in the mancova analysis contrasting charismatic, ideological, and pragmatic leaders on these thematic dimensions. Following from the supposition that ideological leadership is based on the adherence to a set of standards and beliefs, events experienced by ideological leaders were more likely than charismatic or pragmatic leaders to evidence themes of belief commitment ($F_{(2, 114)} = 5.74, \ p \leq .01, \ \bar{X} = 20.68, SE = 2.70$ versus $\bar{X} = 9.99, SE = 2.70$) and spirituality ($F_{(2, 114)} = 4.19, \ p \leq .01, \ \bar{X} = 11.55, SE = 2.17$ versus

$\bar{X} = 4.79$, $SE = 2.17$). Ideological leaders also seemed to differ from pragmatic and charismatic leaders in terms of themes of power ($F_{(2, 114)} = 5.87$, $p \le .01$, $\bar{X} = 4.05$, $SE = 2.58$ versus $\bar{X} = 14.35$, $SE = 2.58$). Ideological leaders seem to frame their leadership style around an overarching mission, as opposed to the need to control.

Significantly contrasting the leader types in terms of change efforts ($F_{(2, 114)} = 5.86$, $p \le .01$), pragmatic leaders ($\bar{X} = 10.48$, $SE = 1.77$) were more likely to be exposed to events stressing the value of incremental progress than charismatic or ideological leaders ($\bar{X} = 3.94$, $SE = 1.77$). Consistent with their focus on solving immediate practical problems, pragmatic leaders experienced more events with themes of focus on the present ($F_{(2, 114)} = 5.69$, $p \le .01$, $\bar{X} = 10.28$, $SE = 1.66$ versus $\bar{X} = 3.39$, $SE = 1.66$), the value of problem-based analysis ($F_{(2, 114)} = 13.74$, $p \le .001$, $\bar{X} = 23.19$, $SE = 2.45$ versus $\bar{X} = 7.42$, $SE = 2.45$), and a focus on practical information ($F_{(2, 114)} = 9.60$, $p \le .001$, $\bar{X} = 18.47$, $SE = 2.38$ versus $\bar{X} = 5.70$, $SE = 2.38$).

This focus on the practical aspects of one's current situation may be related to skepticism about people and their intentions. Pragmatic leaders, in contrast to charismatic and ideological leaders, were more likely to evidence exposure to events indicative of a negative view of self ($F_{(2, 114)} = 2.05$, $p \le .05$, $\bar{X} = 9.23$, $SE = 1.54$ versus $\bar{X} = 4.67$, $SE = 1.54$) and negative life themes ($F_{(2, 114)} = 5.87$, $p \le .01$, $\bar{X} = 10.78$, $SE = 1.67$ versus $\bar{X} = 3.84$, $SE = 1.67$). Another characteristic of the event themes evidenced by pragmatic, as opposed to charismatic or ideological, leaders is their self focus, often at the expense of others ($F_{(2, 114)} = 9.60$, $p \le .001$, $\bar{X} = 18.47$, $SE = 2.38$ versus $\bar{X} = 5.70$, $SE = 2.38$). One interpretation of this finding is that due to their emphasis on analytical problem solving,

pragmatic leaders may appear aloof and inwardly focused, a characteristic of the intensive labor required by problem solving activities (Feist & Gorman, 1999).

In contrasting these three types of leaders in the discrimnant analysis, only one function provided a sizable ($r = .66$, $p \leq .01$) canonical correlation. The lower portion of Table 12 illustrates that several thematic dimensions distinguished the groups. This *Pragmatism* function was characterized by analytical problem solving ($r = .48$), focus on self ($r = .44$), preference for evidence ($r = .39$), incremental progress ($r = .35$), belief commitment ($r = -.34$), focus on the present ($r = .31$), power motives ($r = .31$), spirituality ($r = -.29$), and dramatic change efforts ($r = -.26$). As might be expected, ideological leaders scored lowest on this function ($\overline{X} = -1.03$) and pragmatic leaders scored highest ($\overline{X} = 1.11$). Charismatic leaders scored ($\overline{X} = .00$) between these two extremes.

Performance relationships. Table 13 presents the correlations of the discrimnant function scores with the 12 performance criteria applied in this study. *Interpersonal Concern* was positively related to various indices of exceptional leader performance ($\overline{r} = .28$). Leaders evidencing interpersonal concern were least likely to make negative contributions to society as a whole as well ($\overline{r} = -.27$). It seems that successful leaders, ones that effect mass movements ($r = .43$), make positive societal contributions ($\overline{r} = .35$), and are viewed favorably by others after the expiration of their leadership term ($r = .45$), apply mental models to crises that are laden with consideration for the well-being of others.

Although *Interpersonal Concern* shaped leader orientation towards others and resulted in large scale societal impact, *Pragmatism* exerted weaker, albeit complex,

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effects on performance. Leaders evidencing pragmatic themes in life events were less likely to initiate mass movements (r = -.39) and were subsequently less likely to make large impacts on society (r = -.24). However, *Pragmatism* was related to establishing long-lasting institutions (r = .22) and agendas (r = .22). This pattern of findings demonstrates an important characteristic of pragmatic leadership. Because they are less likely to engage with haste in large scale change initiatives, they are unlikely to be attributed with either impacting positive contributions (r = -.02) or negative contributions (r = -.26) on a societal level. This behind the scenes leadership, influenced by mental models built around incremental change, careful analysis, and preference for facts, may be limited in interpersonal impact, but it shows promise for steady, ongoing performance in the long run.

Table 14 presents the results obtained when the significant functions were used to predict performance after taking relevant controls into account. After statistically controlling for significant ($p \leq .05$) confounds such as organizational size, organizational type, amount of pages devoted to developmental material, and age at rise to power, 10 of the 12 outcomes were significantly ($p \leq .01$) predicted by *Interpersonal Concern* or *Pragmatism*. As expected based on the previous discussion, *Interpersonal Concern* yielded the largest influence on a host of performance indices (β = .38). It seems that successful leaders evidence exposure to events indicative of a commitment to and empathetic understanding of others. Leaders scoring highest on *Pragmatism* were least likely to effect mass movements (β = -.24, $p \leq .001$), a result easily understood based on their iterative approach. Conversely, ideological leaders, scoring lowest on *Pragmatism*,

were most apt to initiate mass movements—a finding that reflects their commitment to a higher calling and their skill at convincing others to join this commitment.

Discussion

Before turning to the conclusions arising from these results, it is important to note that the present study has several methodological limitations that should be considered. The most salient concern is the use of biographies to draw conclusions about the content of life narratives. Most studies of life narratives have examined the developmental impact of events in stories from the individual (e.g., Habermas & Bluck, 2000). In the present study, narrative insights were drawn from third source reports—specifically, from biographers describing critical life events. Although the use of biographical material descriptions of key life events offers some advantages with regard to the availability of historic verification, it is also true that the leaders' subjective interpretation of these events was not, and could not, be examined. Such insights from the leaders would yield a different type of source information—one that would allow for inferences about the relative importance each of these events had on subsequent organizational problem solving and career choice.

It should also be noted that the life events used in the present study were drawn from an a priori taxonomy developed by Pillemer (1998; 2001) and McAdams (2001). While applying an a priori taxonomic structure to such a heterogeneous compilation of data is desirable for multiple reasons, it is possible that other events relevant to the definition of life narratives exist and are not covered by this taxonomy.

Third, it is important to mention that the present study examined life events experienced in the early years of a leader's life. Specifically, the momentous events under

examination were obtained from childhood, adolescence, and early career experiences of these leaders. It is quite possible that other important events were incorporated into the mental models of these leaders at later points, and the present study fails to capture such instantiations. For example, analogous events are likely to play important roles in the combination and reorganization processes used by leaders when solving problems (Scott, Lonergan, & Mumford, in press). Because they likely are incorporated after the leader has acquired more life experiences, however, they probably do not impact leadership orientation or type until the latter stages of direction. Future studies could identify such events in the "in power" portions of a leader's lifespan.

Conclusions

Although these methodological limitations should be considered upon interpreting the results, four broad conclusions have emerged from the present study. First, the present study lends support to the proposition that outstanding leaders rely on past experiences to solve organizational problems (Mumford & Strange, in press). Specifically, vivid, consequential life events and the narratives that link them may shape the nature of the mental models applied by different types of outstanding leaders when confronted with complex, ill-defined crises. This influence of life narratives suggests that certain types of life events, and the themes that recur in them, are tied to the pathways individuals follow to outstanding leadership. The results of the present study illustrate that differences are observed among charismatic, ideological, and pragmatic leaders, and the personalized and socialized variants of them, regarding the kind and structure of events appearing in leader biographies during the primary periods of narrative formation.

Second, upon examination of the types and content of these important life events, the most discernable patterns emerged to discriminate socialized and personalized leaders. Figure 1 illustrates these differences. Socialized leaders experienced more events that solidified or anchored their internal values. This early definition of personal beliefs about how the world works may buffer them against downstream conditions of uncertainty and turbulence—conditions of instability that drastically affect other type of leaders with weaker internal standards. Socialized leaders also had negative experiences that later took on a positive or beneficial interpretation. This early exposure to instances of redemption may also direct the interpretation of negative conditions they later encounter as potential venues for positive outcomes.

Thematic dimensions underlying the events of socialized leaders also follow this line of conclusions. Specifically, socialized leaders encountered more experiences early on treating others with kindness and concern. This model for ethical interpersonal behavior may have arisen in reaction to the exposure to the suffering of others many of them had during the periods critical to narrative formation.

There may be a threshold of exposure to suffering and conditions of strife, however. Specifically, it seems that a life riddled with instability and uncertainty may give rise to the opposite orientation toward others—personalized leadership. Moreover, experiences indicative of powerlessness and uncertainty are tied to later gratuitous uses of violence towards others. This personalized orientation may arise from early experiences of humiliation, events that contaminate the way such leaders later view the world and their place in it.

Given that there are differences in the patterns of life events between socialized and personalized leaders, a third important conclusion to be drawn from the present study comes from the development of the different types of outstanding leadership. Ideological leaders, as expected, were subject to multiple anchoring events during their formative years. Because of this early commitment to their beliefs and spirituality, ideological leaders tend to make decisions about organizational problems based on their beliefs and values, rather than engage in fact finding or analysis. Figure 2 illustrates the importance of beliefs and values on ideological leaders.

Contrasting the types of events ideological leaders encounter, pragmatic leaders experience more originating events, or events that define long-term goals and plans for action. The exposure to these career orienting events combines with themes of problem solving, preference for facts, and focus on the present to portray a formula for the resultant practical, behind-the-scenes leader these individual later become. Skepticism about themselves and others, an unexpected finding, may be an artifact of such intense drive to solve problems and lack of concern for interpersonal impressions.

While ideological and pragmatic leaders were clearly contrasted in terms of the thematic dimensions found in their developmental events, it was difficult to differentiate charismatics in these terms. Instead, charismatic leaders were distinguished form the other leaders in terms of the types of events they most often experienced. Specifically, charismatics were exposed to more turning point, or life redirecting events. This repetitive experience with personal change may explain the versatile and noncommittal tendencies charismatic leaders evidence while in power. One example of this is Manuel Noriega, whose vision changed depending on what group he led.

The final set of conclusions that can be drawn from the present study involves these varying leader experiences and eventual performance outcomes. It seems that experiencing events that emphasize positive views of others as well as empathetic understanding of their strife is strongly related to outstanding performance. In addition, a foundation in problem solving and iterative progress results in kind—leaders experiencing such analytic themes are able to maintain viable agendas and institutions even when they are no longer in direct leadership roles.

Practical Implications

The most critical implication of the present study permeates most organizational initiatives involving leadership—the importance of the life narrative. Experiences encountered by an individual, especially salient ones in late childhood, adolescence, and adulthood, will affect most aspects of leadership. Reflection on key goals and causes of past experiences should influence how a leader communicates with others, engages in political behavior, and forms a vision for the future. Any initiative to improve or change the behaviors associated with such leadership activities should incorporate a sound examination of the life narrative on which they were based. Following from that, efforts to make a given leader aware of the impact on his/her past experiences on day-to-day problem solving should also yield more promising results than simply delineating observable behavior. Specifically, if a leader is aware of the origins of his/her leadership style and subsequent decision-making, he/she may be more likely to evaluate its veracity. Developmental efforts in leadership programs should incorporate the impact of the life narrative on leadership style as opposed to the incomplete approach typically comprised

of assessment of and focus on *behaviors* or *preferences* associated with good or poor styles (Mumford & Manley, 2002).

The life narrative is specifically related to one human resource initiative—selection. Organizations seeking managers who will provide important positive contributions should use background tools, such as biodata, in assessment and selection endeavors in order to identify these individuals. Items such as, "how many types of events focused on analytical problem solving (e.g., debate competitions) have you experienced" are abundant in the biographers of outstanding leaders, and may be related to performance in other types of leaders as well.

Another implication of this study applies to programs aimed to improve leadership. Specifically, this study would indicate that an experiential approach to development, such as job rotation, would be an optimal method compared to current behavioral intervention techniques. For example, one approach to developing empathy in corporate leaders may be to expose them to the suffering, or difficulties in workers' lives, by rotating through such lower-level positions. Potential moderators (e.g., negative view of the group that suffers) may exist, however, and may hinder this effect. Future research could examine what important moderating variables exist.

In addition to selection and development of leaders, this study yields an important implication for profiling and anticipating outcomes of leaders without the luxury of first-hand observation. By obtaining second-hand data about the concrete, objectively verifiable events that occurred in a given leader's life, one should be able to predict his/her leadership style and some subsequent decision-making strategies. For example, Fidel Castro's early life was marked by contaminating events with themes of

objectification and coercion of others. It would be reasonable to assert that, based on the application of mental models centered on such themes, he would apply such techniques to solve novel, ill-defined problems while in power.

Theoretical Implications

This study provides a more comprehensive approach to leadership development (Mumford & Manley, 2002). Specifically, it shows that we should be paying attention to the influence of developmental experiences and in what way they are construed in the context of leaders' lives. While prior studies have indicated that leader problem solving occurs through the reflection and manipulation of past experiences (Mumford & Strange, in press), the present study yields some insight into the type and content of such experiences underlying the mental models leaders apply to problems. Future studies should examine this interplay more specifically; we should next consider how differences in life narratives, or the packages of life experiences coupled with contextual characteristics, influence specific actions in decision-making during crises (Bluck, 2003). One conclusion in the present study indicates that leaders who experience more unsettling turbulence through more humiliating events may be prone to making tough-minded or unsympathetic appraisals of the causes of a crisis. Other characteristics of problem-solving may be linked to reflection of the goals and causes of thematic content of past experiences as well.

Performance relationships with thematic content of events experienced support that leaders may be as influenced by their past as they are influenced by examining the objective characteristics of a current problem. For example, leaders who experienced numerous past instances of consideration—exposure to suffering, positive view of

others—were likely to make long term contributions to society at large regardless of operating constraints such as organizational size or type, geographic region, or time period. Further leadership studies should be aimed at delineating the particular steps or actions that intervene between characteristics of the extant situational constraints and characteristics of past goals and causes. It is possible that an individual difference (e.g., intelligence, situational awareness, or wisdom) may mediate this relationship, and it may differentiate leaders from non-leaders in the population at large. Future studies should employ designs that speak to these issues.

Another implication of the present study is that experiences encountered in early adulthood do seem to shape the pathway a leader pursues towards outstanding leadership. The present study shows that certain types of events have been experienced more often by certain types of leaders. For example, pragmatic leaders had more experiences with originating, or career defining, events while ideological leaders had more experiences with analogous events. In addition, the thematic content differed among the developmental events experienced by the different leader styles. These marked contrasts may indicate that the integration of a pattern of certain types of events by an individual may result in a predilection toward one of the leadership styles and orientations for appraising new, ill-defined problems.

The most important result of this study is simply that we have learned more about the development of the different styles of outstanding leaders. Prior to this study, there was limited literature on the development of leaders in a naturalistic setting, and far less work on the development of specific styles of outstanding leadership. Due to design, this study does not address how leadership as a general phenomenon develops. However, the

present study did reveal important practical and theoretical implications for the differential development of orientation and type of leadership, and it provides a foundation for future work in this domain.

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Table 1: Leader Sample

	Ideological	Charismatic	Pragmatic
Socialized	Jane Addams Susan B. Anthony Dietrich Bonhoeffer Michael Collins Eugene V. Debs John Dewey W.E.B. du Bois Betty Friedan Indira Gandhi Mohandas Gandhi Charles de Gaulle Emma Goldman Dag Hammarskold John L. Lewis Kwame Nkrumah Ronald W. Reagan Eleanor A. Roosevelt Theodore Roosevelt Lech Walesa Woodrow T. Wilson	Mustafa K. Ataturk David Ben-Gurion Cesar Chavez Winston Churchill Henry Ford Samual Gompers Lee Iacocca John F. Kennedy Jomo Kenyatta Fiorello H. LaGuardia Martin Luther King, Jr. Douglas MacArthur Louis B. Mayer J.P. Morgan Edward R. Murrow Gamal Abdel Nasser Sam Rayburn Franklin D. Roosevelt Anwar Sadat Margaret Thatcher	Warren Buffet Richard Daley Walt Disney John Foster Dulles Alfred Dupont Dwight D. Eisenhower Felix Frankfurter Berry Gordy Katharine Graham Oliver Wendell Holmes George Marshall Mikail Gorbechev Thomas Watson George Hyman Rickover Erwin Rommel George Soros Josip B. Tito Harry S Truman Sam Walton Booker T. Washington
Personalized	Lavrenti Beria Fidel Castro Georges Clemenceau Ferdinand Foch Francisco Franco Marcus Garvey Warren Harding Rudolf Hess Heinrich Himmler Ho Chi Minh Vladimir Lenin Joe McCarthy Pol Pot John D. Rockefeller Josef Stalin Leon Trotsky Wilhelm II Deng Xiaoping Emiliano Zapata Mao Ze-dong	Idi Amin Neville Chamberlain John Delorean Porfirio Diaz Francois Duvalier Hermann Goring Assad Hafaz Adolf Hitler Jimmy Hoffa Herbert R. Hoover J. Edgar Hoover Huey P. Long Ferdinand Marcos Benito Mussolini Manuel Noriega Eva Peron Juan Peron Rafael Trujillo William C. Westmoreland Malcolm X	Al Capone Andrew Carnagie Otis Chandler Lyndon B. Johnson Al Dunlap Henry Ford II Carlo Gambino Leslie Groves Leona Helmsley Reinhard Heydrich Horatio Kitchener Alfreid Krupp Robert Moses Rupert Murdoch George Patton Jackie Presser Richard M. Nixon David Sarnoff Martha Stewart Lew Wasserman

Table 2: Benchmark Examples of Event Types Used in Event Identification

Event Type	Benchmark Example
Originating Event	"From an early age, the young Rupert [Murdoch] was aware of the power and the glory and the sheer fun which accrued to his father from newspapers. Keith [Rupert's father] used to take his son around the Herald's office on Flinders Street, and Rupert often said later that the smell of the ink, the noise of the presses and the highly charged atmosphere were irresistible. 'The life of a publisher is the best life in the whole world. When kids are subjected to it there's not much doubt they'll be attracted to it.'" (Shawcross, 1997 pp.27)
Turning Point Event	"The most dramatic story concerns Lewis's involvement in the 1903 disaster at the Union Pacific Railroad Company's coal mine in Hanna, WY. Passing through the area by chance, Lewis arrived in time to assist a rescue team in carrying out he torn, charred bodies of 234 miners…'what ripped his emotions to shreds was the sight of the numb, mute faces of the wives now suddenly widows of the men they loved.'" (Dubofsky & Van Tine, 1986 pp. 14-15)
Anchoring Event	"In what Fidel calls, 'a decisive moment on my life,' Angel Castro decided during the boys' summer holiday after the 4th grade that they would not go back to school…But Fidel [Castro] was determined to return to school. As he tells the story, 'I remember going to mother and explaining to her that I wanted to go on studying; it wasn't fair not to let me go to school. I appealed to her and told her I would set fire to the house if I wasn't sent back…so they decided to send me back. I'm not sure if they were afraid or just sorry for me, but my mother pleaded my case.' Fidel was learning quickly that absolute and uncompromising stubbornness was a powerful weapon. This may have been the most important lesson he had drawn from his young years at the *finca*, and he never forgot it." (Szulc, 1986 pp. 112)
Analogous Event	"Almost forty years later, on the occasion of a commencement address at Fisk, and perhaps under the influence of the occasion, DuBois recalled those three years of "splendid inspiration" and nearly "perfect happiness" with teachers whom he respected, amid surroundings which inspired him. The ten years after Fisk he chronicled as "a sort of prolongation of my Fisk college days." I was at Harvard, but not of it. I was a student of Berlin but still a son of Fisk. I used my days there to understand my new setting…" (Broderick, 1959 pp. 9)
Redemption Event	"She [Betty Friedman], who had been the ringleader and chief instigator, the one who generated all the excitement, was suddenly alone, abandoned by her friends. The creator of clubs was not chosen for the most exclusive club at all—the high school sorority. She was desolate…The year of loneliness that followed was the lowest point of her life. She blamed it primarily on anti-Semitism…The sight of the car full of friend, a vision that she yearned for, triggered something in her, and she made a promise to herself: 'They may not like me now, but [someday] they are going to look up to me.'" (Hennessee, 1999 pp. 15)
Contaminating Event	[After receiving average marks on his officer's appraisal, [Charles] de Gaulle was given a lackluster assignment.] "Indeed, for a soldier with his innate conviction of his intellectual superiority, the choice of a department concerned with such routine matters as transport and supply was humiliating. At Mayence, in fact, he was put in charge of refrigeration, which must have seemed an insulting punishment for an unwelcome independence of spirit…[de Gaulle after receiving the news] 'Those c…s of the Ecole de Guerre! I shall only come back to this dirty hole [sale boite] as Commandant of the Ecole! And you'll see how everything will change!'" (Crozier, 1973 pp. 39)

Table 3: Thematic Constructs Used in Event Content Coding.

Construct	Behavioral Examples	Justification for Inclusion
FUTURE FOCUS	• Speaking about concern for future goals or conditions • Prioritizing future goals over present needs or past standards	Charismatic leaders communicate visions that are loosely tied to a set of future goals (House, 1977; Shamir, House, & Arthur, 1992; House & Howell, 1992)
INSPIRATIONAL COMMUNICATION	• Persuading others using emotional or affective communication • Practice in speaking techniques such as debate or drama club	Charismatic leaders use affective speech as primary means of influence (House and Podsakoff, 1994; Conger, 1989)
IMAGE MANAGEMENT	• Role modeling desired behaviors • Concern with appearance to others	Charismatic leaders tend to exert direct influence on followers by role modeling desired behaviors (House, 1977)
RISK TAKING	• Engaging in risky endeavors • Risk taking behavior is rewarded	Charismatic leaders engage in public risk taking to convey heroic image for followers (Conger & Kanungo, 1998; House, 1977)
PERSONAL ACHIEVEMENT	• Making obvious contributions to performance or letting others know about achievements • Direct influence tactics such as taking credit for accomplishments	Charismatic leaders tend to take credit for contributions and engage in highly visible leadership activities (House & Howell, 1992)
PERFORMANCE EXPECTATIONS	• Witnessing rewards for high expectations • Viewing accomplishments in terms of overall goal attainment versus incremental progress	Charismatic leaders convey high expectations to followers through their visions and other direct communications (House & Podsakoff, 1994)
CHANGE EFFORTS	• Witnessing dramatic change efforts to status quo • Large-scale change efforts are rewarded	Visions of charismatic leaders portray a model for the future that is markedly different from the status quo (Shamir, House, & Arthur, 1992; Weber, 1947)
EXPOSURE TO CRISES	• Experiencing some type of crisis or emergency • Witnessing control through a crisis (having a role model of how to effectively deal with	Charismatic leaders often emerge in times of crisis or events marked with instability and change (Hunt, Boal, & Dodge, 1999; House & Howell, 1992)
PAST FOCUS	• Preferring past conditions, traditions, or way of life • Focusing on history or historical events and/or people	Ideological often point to past group status or traditions in communicating their visions (Strange & Mumford, 2002)
BELIEF COMMITMENT	• Discounting alternative views that are not congruent with belief system • Denying normal allowances (e.g., types of food, material possessions) due to belief system	Ideological leaders use their belief systems to make decisions, influence and select followers, and motivate others (Strange & Mumford, 2002; Robinson, 1996)
SPIRITUALITY	• Viewing faith, morals, and/or religion as primary directive in life • Using symbols and/or rituals to reflect religion or spirituality	Ideological leaders view spirituality as most important aspect of daily life and display this belief through use of symbols and rituals (Post, Ruby, & Shaw, 2002)
ENVIRONMENTAL CONFLICT	• Experiencing societal events that change the way that individuals live and/or interact • Witnessing war, leader assassination, and/or change in resources	Ideological leaders tend to arise from conditions of marked societal turbulence (Post, Ruby, & Shaw, 2002)
INJUSTICE	• Witnessing inequitable distribution of resources or income disparity between groups • Seeing group as indebted by society for past wrongs	Ideological leaders' visions are based on restoring past glory or rightful place in society to group members and may be based on a sensitivity to injustice or victimization (Bond, Kwan, & Li, 2003; Hogan & Dickstein, 1972)

Table 3 *(continued).*

Construct	Behavioral Examples	Justification for Inclusion
PRESENT FOCUS	• Surveying current conditions • Gathering information about people and problems in current situation	Pragmatic leaders place an emphasis on day-to-day current problems (Mumford & Van Doorn, 2001; Qin & Simon, 1990)
ANALYSIS	• Applying a logical or step-by-step process of problem solving • Witnessing flexible or malleable decision-making	Pragmatic leaders amend their problem solving strategies based on logical analysis of incoming feedback (Bartone, Snook, & Tremble, 2002)
EVIDENTIAL PREFERENCE	• Exposure to factual data (e.g., numbers, statistical analyses) use in decision-making • Disconfirming beliefs and values in face of conflicting facts or data	Pragmatic leaders prefer to use concrete evidence to a) make decisions, and b) influence followers (Mumford & Van Doorn, 2001)
INCREMENTAL PROGRESS	• Viewing need for gradual steps • Delaying gratification for end state/ outcome in order to break problem down into steps	Pragmatic leaders rely on iterative problem solving activities to define and solve complex organizational problems (Reiter-Palmon & Illies, 2004)
EXPOSURE TO DIVERSITY	• Experiencing diverse people, places, and ideas • Searching for similar and non-similar properties of diverse people and ideas	Pragmatic problem solving relies on an integration of discrepant concepts to form unique solutions to everyday problems (Gardner, 1993; Feldman, 1999)
POSITIVE VIEW OF OTHERS	• Appraising others positively or kindly • Expressing concern for the safety, needs, and happiness of others	Socialized leaders base their problem solving efforts on the good of others (House & Howell, 1992)
POSITIVE VIEW OF SELF	• Experiencing praise or assurance from others about personal abilities • Expressing confidence in one's own ability	Socialized leaders are able to trust others based on prior experiences of reliance and confidence (McClelland, 1975)
COMMITMENT TO OTHERS	• Expressing sense of responsibility to welfare of others • Making personal sacrifices for good of the group	Socialized leaders prioritize group needs above personal motives (O'Connor, Mumford, et al., 1995)
EXPOSURE TO SUFFERING	• Witnessing others suffer pain or life strife • Empathizing with others' suffering	Socialized leaders demonstrate a marked concern for the well-being of others; such empathy may be developed through experiences with others' pain (Nidich, Nidich, & Alexander, 2000)
UNCERTAINTY/ POWERLESSNESS	• Experiencing powerless due to rapidly changing situation • Experiencing insecurity due to lack of control over one's own situation	Personalized leaders evidence a strong need to protect themselves over the good of the group (Martin, Scully, & Levitt, 1990; Goodstadt & Hjelle, 1973)
NEGATIVE VIEW OF OTHERS	• Expressing distrust of others, possibly due from abandonment and rejection form others in past • Viewing others as objects or means to an end with little regard for their safety or needs	Personalized leaders are willing to use others as tools or objects for personal gain (House & Howell, 1992; Eisenberg & Miller, 1987)
NEGATIVE VIEW OF SELF	• Viewing others as superior to self, either internally or hearing such appraisals from others • Experiencing doubt in personal abilities	Narcissism, or a motivated defense of a weak-self system based on early experiences (Emmons, 1981; Fromm, 1973), is associated with personalized leadership (O'Connor, et al., 1995)
POWER MOTIVES	• Subduing or over-powering others in pursuit of personal goals • Converting others to serve personal goals with use of threat, promise of reward	Personalized leaders have a high need for power and justify harm to others in pursuit of such personal needs (McClelland, 1975; O'Connor, Mumford, et al., 1995)
NEGATIVE LIFE THEMES	• Expressing a destructive image of the world and one's place in it • Viewing world as evil, sinister, and cruel	Personalized leaders' lack of concern for social system may be due to their negative perceptions or world view (O'Connor, Mumford, et al., 1995)
FOCUS ON SELF (OVER OTHERS)	• Prioritizing protection of oneself over welfare of others • Exaggerating one's own abilities and skills in presence of a group	Self-protection and self-aggrandizement are positively associated with personalized leadership (House & Howell, 1992)

Table 4: Means, Standard Deviations, and Correlations for Event Types

Events	$\overline{X}$	SD	1	2	3	4	5	6
1 Originating Events	2.57	1.75	1.0	.07	.12	-.04	.05	-.16
2 Turning Point Events	1.47	1.40		1.0	.12	-.02	.17	-.01
3 Anchoring Events	3.51	2.54			1.0	-.07	.08	.00
4 Analogous Events	.15	.44				1.0	.10	.07
5 Redemption Events	1.72	1.56					1.0	.06
6 Contaminating Events	2.15	1.77						1.0

Note: No correlations were signifcant at *p* < .10 level.

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Table 5: Frequency of Event Types by Orientation

	Originating	Anchoring	Analogous	Turning Point	Redemption	Contaminating
Socialized						
Frequency	150	236	14	93	127	117
Percent[a]	49.3	54.8	73.7	53.4	61.7	44.3
Personalized						
Frequency	154	195	5	81	79	147
Percent	50.7	45.2	26.3	46.6	38.3	55.7

[a]Percent within type of event.

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Table 6: Frequency of Event Types by Leader Type

	Originating	Anchoring	Analogous	Turning Point	Redemption	Contaminating
Charismatic						
Frequency	102	116	7	71	71	93
Percent[a]	33.6	26.9	36.8	40.8	34.5	35.2
Ideological						
Frequency	88	206	4	47	58	83
Percent	28.9	47.8	21.1	27.0	28.2	31.4
Pragmatic						
Frequency	114	109	8	56	77	88
Percent	37.5	25.3	42.1	32.2	37.4	33.3

[a]Percent within type of event.

Table 7: Frequency of Event Types by Leader Orientation and Leader Type

		Originating	Anchoring	Analogous	Turning Point	Redemption	Contaminating
Socialized Charismatic							
	Frequency	52	54	6	29	45	48
	Percent[a]	17.1	12.5	31.6	16.7	21.8	18.2
Personalized Charismatic							
	Frequency	50	62	1	42	26	45
	Percent	16.4	14.4	5.3	24.1	12.6	17.0
Socialized Ideological							
	Frequency	41	114	3	29	37	41
	Percent	13.5	26.5	15.8	16.7	18.0	15.5
Personalized Ideological							
	Frequency	47	92	1	18	21	42
	Percent	15.5	21.3	5.3	10.3	10.2	15.9
Socialized Pragmatic							
	Frequency	57	68	5	35	45	28
	Percent	18.8	15.8	26.3	20.1	21.8	10.6
Personalized Pragmatic							
	Frequency	57	41	3	21	32	60
	Percent	18.8	9.5	15.8	12.1	15.5	22.7

[a]Percent within type of event.

Table 8: Means, Standard Deviations, and Correlations for Thematic Dimensions

Dimensions	$\bar{X}$	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1 Future Focus	5.07	8.37	1.0	.24	.24	.11	.29	.11	.05	.06	.01	-.05	-.10	-.20	-.03	-.13	.076	.06	.06	-.18	.09	.19	-.03	-.03	.07	.04	.17	.06	.05	.21
2 Inspirational Communication	8.31	10.58		1.0	.31	.07	.17	.21	.03	.13	.04	.00	.01	.05	.15	-.23	-.12	-.14	-.12	-.18	.17	.01	.09	.16	-.14	-.26	-.09	-.17	-.17	-.10
3 Image Management	8.82	13.12			1.0	.11	.56	.18	.06	.02	-.08	-.19	-.02	.04	-.05	-.25	-.24	-.24	-.15	-.17	.00	-.03	-.02	-.03	-.11	-.10	-.12	.04	-.20	.02
4 Risk Taking	5.59	8.50				1.0	.14	.34	.14	.13	-.03	-.12	.02	.10	.05	.27	.32	.33	.06	.17	.32	.11	.36	.24	.07	.00	.06	.08	.04	.17
5 Personal Achievement	5.42	8.56					1.0	.29	.24	.10	-.04	-.13	-.15	-.15	-.14	-.23	-.12	-.16	-.10	-.15	.07	.14	-.08	-.02	-.06	-.02	-.02	.04	-.10	.06
6 Performance Expectations	6.26	9.56						1.0	-.08	-.11	-.12	-.13	-.07	-.17	-.20	.04	.12	.05	.02	.03	.25	.17	.02	-.01	.05	.00	.12	.01	.10	.10
7 Dramatic Change Efforts	5.39	8.68							1.0	.15	.05	.22	.01	.18	.09	-.14	-.06	-.05	.28	-.14	-.04	-.11	.00	.05	.05	-.05	-.11	.01	-.04	-.02
8 Exposure to Crises	7.55	10.94								1.0	.26	-.09	-.06	.25	.17	-.03	-.19	.02	-.19	-.14	-.05	-.18	.05	.05	.20	-.05	-.11	-.10	-.02	-.07
9 Past Focus	6.54	12.25									1.0	.26	.38	.33	.24	-.17	-.15	-.20	-.08	-.08	.03	-.02	.07	.32	.11	.10	.04	-.10	-.07	-.07
10 Belief Commitment	13.56	17.70										1.0	.40	.11	.26	-.03	-.06	-.07	-.20	.03	.24	.23	.07	.06	-.02	-.15	-.05	-.10	-.06	-.06
11 Spirituality	7.05	14.37											1.0	.19	.17	-.04	-.21	-.16	-.14	.14	.08	-.09	.19	.05	.03	-.02	-.13	.27	-.09	-.21
12 Conflict	13.96	18.50												1.0	.55	-.08	-.06	-.06	-.13	-.07	.02	-.12	.09	.44	.17	.02	-.05	.03	-.10	-.20
13 Injustice	13.16	16.70													1.0	-.03	-.06	-.16	.09	-.14	.05	.04	.19	.17	.23	.08	.04	.17	.02	-.05
14 Present Focus	5.69	11.08														1.0	.63	.72	.35	.49	.15	.09	.29	-.05	.05	-.18	.02	-.14	.11	-.08
15 Analysis	12.68	17.34															1.0	.83	.35	.45	.17	.09	.13	.06	.05	-.02	.11	.04	.09	.07
16 Evidential Preference	9.96	16.55																1.0	.30	.49	-.02	.06	.21	-.05	.08	-.11	.07	.06	.06	.15
17 Incremental Progress	6.16	11.65																	1.0	.13	.22	.09	.19	.06	.08	-.10	-.08	.08	.05	.12
18 Exposure to Diversity	9.67	13.20																		1.0	.33	.12	.04	-.05	.01	.14	-.13	-.05	-.01	.10
19 Positive View of Others	8.59	13.10																			1.0	.06	.25	.06	.00	-.15	-.11	-.04	.05	.05
20 Positive View of Self	8.99	14.26																				1.0	.53	.12	-.16	-.19	.07	-.18	-.10	-.10
21 Commitment to Others	10.68	15.05																					1.0	.47	-.04	.00	-.08	-.17	-.12	.02
22 Exposure to Suffering	7.36	13.07																						1.0	.16	.16	.05	-.24	-.11	-.25
23 Uncertainty/Powerlessness	10.03	13.96																							1.0	.43	.38	-.17	-.02	-.14
24 Negative View of Others	15.02	17.37																								1.0	.48	.29	.59	.58
25 Negative View of Self	6.20	10.03																									1.0	.55	.51	.53
26 Power Motives	10.91	18.53																										1.0	.53	.74
27 Negative Life Themes	6.36	11.56																											1.0	.60
28 Focus on Self	8.52	14.73																												1.0

Note. r = .24 significant at .01 level
Note. r = .18 significant at .05 level

Table 9: Multivariate Analysis of Covariance Results Contrasting Leaders with Respect to Developmental Dimensions

	F	df	p	η
Covariates				
None[a]	—	—	—	—
Main Effects				
Orientation				
(Socialized versus Personalized)	3.43	28, 114	.001	.52
Type				
(Charismatic, Ideological, Pragmatic)	2.52	28, 114	.001	.44
Interactions				
Orientation x Type	1.16	28, 114	.289	.27

Note. F = F Ratio, df = Degrees of Freedom, p = Significance Level (Determined by using Roy's Largest Root), η = Effect Size.

[a]No significant covariates were identified in this analysis.

Table 10: Leader Orientation with Respect to Differences in Thematic Content of Events

	Dimensions	Personalized		Socialized				
		$\overline{X}$	SE	$\overline{X}$	SE	F	df	p
1	Future Focus	4.90	1.09	5.22	1.09	.04	1, 114	n.s.[a]
2	Inspirational Communication	6.23	1.36	10.39	1.36	4.65	1, 114	.05
3	Image Management	8.32	1.69	9.32	1.69	.17	1, 114	n.s.
4	Risk Taking	3.33	1.04	7.85	1.04	9.35	1, 114	.01
5	Personal Achievement	6.08	1.10	4.74	1.10	1.36	1, 114	n.s.
6	Performance Expectations	5.67	1.24	6.84	1.24	.44	1, 114	n.s.
7	Dramatic Change Efforts	6.30	1.10	4.48	1.10	.73	1, 114	n.s.
8	Exposure to Crises	6.40	1.42	8.70	1.42	1.29	1, 114	n.s.
9	Past Focus	5.45	1.58	7.63	1.58	.95	1, 114	n.s.
10	Belief Commitment	11.97	2.21	15.14	2.21	1.02	1, 114	n.s.
11	Spirituality	4.69	1.77	9.39	1.77	3.49	1, 114	.10
12	Conflict	11.32	2.39	16.58	2.39	2.40	1, 114	.10
13	Injustice	9.00	2.11	17.31	2.11	7.72	1, 114	.01
14	Present Focus	3.95	1.36	7.43	1.36	3.27	1, 114	.10
15	Analysis	9.33	2.00	16.03	2.00	5.60	1, 114	.05
16	Evidential Preference	6.25	1.94	13.67	1.94	7.29	1, 114	.01
17	Incremental Progress	4.84	1.45	7.46	1.45	1.62	1, 114	n.s.
18	Exposure to Diversity	7.44	1.70	11.90	1.70	3.41	1, 114	.10
19	Positive View of Others	5.59	1.64	11.58	1.64	6.64	1, 114	.01
20	Positive View of Self	7.36	1.84	10.61	1.84	1.54	1, 114	n.s.
21	Commitment to Others	5.55	1.84	15.80	1.84	15.40	1, 114	.001
22	Exposure to Suffering	3.02	1.61	11.68	1.61	14.34	1, 114	.001
23	Uncertainty/Powerlessness	12.12	1.77	7.92	1.77	2.79	1, 114	.10
24	Negative View of Others	22.86	1.99	7.16	1.99	31.08	1, 114	.001
25	Negative View of Self	7.73	1.26	4.66	1.26	2.95	1, 114	.10
26	Power Motives	18.28	2.10	3.55	2.10	24.46	1, 114	.001
27	Negative Life Themes	10.08	1.36	2.63	1.36	14.82	1, 114	.001
28	Focus on Self	12.31	1.71	4.71	1.71	9.79	1, 114	.01

Note. X = Group Average, SE = Standard Error, F = F Ratio, df = Degrees of Freedom, p = Significance Level.
[a]n.s. = $p > .10$

Table 11: Leader Type with Respect to Differences in Thematic Content of Events

Dimensions	Charismatic		Ideological		Pragmatic		F	df	p
	$\overline{X}$	SE	$\overline{X}$	SE	$\overline{X}$	SE			
1 Future Focus	5.68	1.34	3.82	1.34	5.70	1.34	.64	2, 114	n.s.[a]
2 Inspirational Communication	9.47	1.66	8.32	1.66	7.13	1.66	.49	2, 114	n.s.
3 Image Management	11.67	2.08	9.13	2.08	5.65	2.08	2.11	2, 114	n.s.
4 Risk Taking	6.08	1.28	3.29	1.28	7.40	1.28	2.68	2, 114	.10
5 Personal Achievement	5.39	1.35	6.70	1.35	4.16	1.35	.88	2, 114	n.s.
6 Performance Expectations	5.79	1.52	5.30	1.52	7.68	1.52	.68	2, 114	n.s.
7 Dramatic Change Efforts	5.91	1.35	7.54	1.35	2.71	1.35	3.30	2, 114	.05
8 Exposure to Crises	8.09	1.74	7.41	1.74	7.14	1.74	.07	2, 114	n.s.
9 Past Focus	9.08	1.93	6.79	1.93	3.75	1.93	.62	2, 114	n.s.
10 Belief Commitment	12.00	2.70	20.68	2.70	7.98	2.70	5.74	2, 114	.01
11 Spirituality	6.95	2.17	11.55	2.17	2.63	2.17	4.19	2, 114	.01
12 Conflict	15.94	2.93	14.53	2.93	11.39	2.93	.62	2, 114	n.s.
13 Injustice	14.86	2.59	11.92	2.59	12.69	2.59	.34	2, 114	n.s.
14 Present Focus	3.56	1.66	3.23	1.66	10.28	1.66	5.69	2, 114	.01
15 Analysis	7.49	2.45	7.36	2.45	23.19	2.45	13.74	2, 114	.001
16 Evidential Preference	5.50	2.38	5.90	2.38	18.47	2.38	9.60	2, 114	.001
17 Incremental Progress	5.89	1.77	1.99	1.77	10.58	1.77	5.86	2, 114	.01
18 Exposure to Diversity	9.11	2.09	8.42	2.09	11.48	2.09	.58	2, 114	n.s.
19 Positive View of Others	7.42	2.01	10.36	2.01	7.97	2.01	.60	2, 114	n.s.
20 Positive View of Self	6.57	2.25	8.74	2.25	11.64	2.25	1.27	2, 114	n.s.
21 Commitment to Others	9.61	2.26	11.74	2.26	10.68	2.26	.22	2, 114	n.s.
22 Exposure to Suffering	8.46	1.98	6.11	1.98	7.48	1.98	.35	2, 114	n.s.
23 Uncertainty/Powerlessness	9.33	2.17	6.79	2.17	13.95	2.17	1.91	2, 114	.10
24 Negative View of Others	15.14	2.43	11.46	2.43	18.45	2.43	2.78	2, 114	.10
25 Negative View of Self	4.13	1.54	5.22	1.54	9.23	1.54	2.05	2, 114	.05
26 Power Motives	12.40	2.58	4.05	2.58	16.30	2.58	5.87	2, 114	.01
27 Negative Life Themes	3.69	1.67	4.60	1.67	10.78	1.67	5.87	2, 114	.01
28 Focus on Self	7.54	2.10	2.43	2.10	15.57	2.10	5.29	2, 114	.001

Note. X = Group Average, SE = Standard Error, F = F Ratio, df = Degrees of Freedom, p = Significance Level.

[a]n.s. = $p > .10$

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Table 12: Signifcant Discriminant Functions

Function One: Interpersonal Concern ($R = .71, p < .001$)	Loading Scores
27) Negative View of Others	-.50
26) Power Motives	-.42
21) Commitment to Others	.35
22) Exposure to Suffering	.34
24) Negative Life Themes	-.33
Socialized Leaders	1.01
Personalized Leaders	-1.01

Signficant Function by Leader Type

Function One: Pragmatism ($R = .66, p < .01$)	Loading Scores
15) Analysis	.48
28) Focus on Self	.44
16) Evidential Preference	.39
17) Incremental Progress	.35
10) Belief Commitment	-.34
14) Present Focus	.31
26) Power Motives	.31
11) Spirituality	-.29
7) Dramatic Change Efforts	-.26
Charismatic Leaders	.00
Ideological Leaders	-1.03
Pragmatic Leaders	1.11

Table 13: Correlations of Performance Criteria with Discriminant Functions

Criteria	Interpersonal Concern	Pragmatism
1) How much did the leader contribute to society?	.24	-.24
2) How long did these contributions last?	.29	.06
3) How many people did this leader effect?	.11	-.15
4) How favorably did the author view the leader?	.45	-.08
5) How many positive contributions did the leader make?	.34	-.04
6) How many negative contributions did the leader make?	-.28	-.15
7) How many different types of positive contributions did the leader make?	.36	-.02
8) How many different types of negative contributions did the leader make?	-.26	-.26
9) To what degree do the institutions established still exist?	.33	.22
10) How many institutions were established by the leader?	.09	.09
11) Did the leader have a vision that was maintained after they were out of power?	.25	.22
12) Did the leader effect mass movements?	.43	-.39

Note: r = .18 signficicant at .05 level.

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Table 14: Summary of Regression Results

Criteria	R	R^2	p	Significant Covariates ($p = .05$)	Beta Weight	Significant Functions ($p = .05$)	Beta Weight	High Group	Low Group
1) How much did the leader contribute to society?	.50	.25	.001	Type of Organization	-.39	Interpersonal Concern	.28	Socialized	Personalized
2) How long did these contributions last?	.29	.08	.001	None	—	Interpersonal Concern	.29	Socialized	Personalized
3) How many people did this leader effect?	.43	.19	.001	Organizational Size Type of Organization	.33 -.21	None	—	—	—
4) How favorably did the author view the leader?	.56	.32	.001	Rise to Power Age Detail of Developmental Sections	-.22 .28	Interpersonal Concern	.49	Socialized	Personalized
5) How many positive contributions did the leader make?	.40	.16	.001	None	—	Interpersonal Concern	.36	Socialized	Personalized
6) How many negative contributions did the leader make?	.31	.09	.001	None	—	Interpersonal Concern	-.27	Socialized	Personalized
7) How many different types of positive contributions did the leader make?	.45	.21	.001	Type of Organization	-.29	Interpersonal Concern	.38	Socialized	Personalized
8) How many different types of negative contributions did the leader make?	.49	.24	.001	Type of Organization Rise to Power Age	-.35 .17	Interpersonal Concern	-.23	Socialized	Personalized
9) To what degree do the institutions established still exist?	.47	.22	.001	Was Leader in Power Pre or Post WWII	.28	Interpersonal Concern	.29	Socialized	Personalized
10) How many institutions were established by the leader?	.34	.12	.01	Number of Pages in Biography	.33	None	—	—	—
11) Did the leader have a vision that was maintained after they were out of	.31	.10	.01	Rise to Power Age	-.19	Interpersonal Concern	.27	Socialized	Personalized
12) Did the leader effect mass movements?	.53	.28	.001	Type of Organization Rise to Power Age	-.34 -.13	Pragmatism	-.24	Pragmatic	Ideological

Note : R = Multiple Correlation; R^2 = Percent of Variance Accounted For; p = Significance Level; Beta = Standardized Regression Weight.