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The bright and dark sides of leader traits: A review and theoretical extension of the leader trait paradigm

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ABSTRACT

The leader trait perspective is perhaps the most venerable intellectual tradition in leadership research. Despite its early prominence in leadership research, it quickly fell out of favor among leadership scholars. Thus, despite recent empirical support for the perspective, conceptual work in the area lags behind other theoretical perspectives. Accordingly, the present review attempts to place the leader trait perspective in the context of supporting intellectual traditions, including evolutionary psychology and behavioral genetics. We present a conceptual model that considers the source of leader traits, mediators and moderators of their effects on leader emergence and leadership effectiveness, and distinguish between perceived and actual leadership effectiveness. We consider both the positive and negative effects of specific "bright side" personality traits: the Big Five traits, core self-evaluations, intelligence, and charisma. We also consider the positive and negative effects of "dark side" leader traits: Narcissism, hubris, dominance, and Machiavellianism.
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If one sought to find singular conditions that existed across species, one might find few universals. One universal that does exist, at least those species that have brains and nervous systems, is leadership. From insects to reptiles to mammals, leadership exists as surely as collective activity exists. There is the queen bee, and there is the alpha male. Though the centrality of leadership may vary by species (it seems more important to mammals than, say, to avians and reptiles), it is fair to surmise that whenever there is social activity, a social structure develops, and one (perhaps the) defining characteristic of that structure is the emergence of a leader or leaders. The universality of leadership, however, does not deny the importance of individual differences — indeed the emergence of leadership itself is proof of individual differences. Moreover, even casual observation of animal (including human) collective behavior shows the existence of a leader. Among a herd of 100 cattle or a pride of 20 lions, one is able to detect a leadership structure (especially at times of eating, mating, and attack). One quickly wonders: What has caused this leadership structure to emerge? Why has one animal (the alpha) emerged to lead the collective? And how does this leadership cause this collective to flourish — or founder?

Given these questions, it is of no surprise that the earliest conceptions of leadership focused on individual differences. The most famous of these is Thomas Carlyle's "great man" theory, which argued, "For, as I take it, Universal History, the history of what man has accomplished in this world, is at bottom the History of the Great Men who have worked here" (Carlyle, 1840/2008, p. 1). Despite its intuitive and presumably historical appeal, until recently, this "great man" (or woman) approach, and the trait perspective in general, fell on hard times. Reviewers of the literature commented that the approach was "too simplistic" (Conger & Kanungo, 1998, p. 38), "futile" (House & Aditya, 1997, p. 410), and even "dangerous" and a product of "self-delusion" (see Andersen, 2006, p. 1083).[1]

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[1] House and Aditya (1997) themselves did not espouse this viewpoint. Rather, they were summarizing what they perceived to be the prevailing sentiment in the leadership community.

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As so often happens in intellectual affairs, however, as the obituaries were being written, the seeds of a reemergence were being sown. Personality theory, for many years fragmented by issues both pragmatic (how to measure personality) and philosophical (whether to focus on individual differences [nomothetics] or individual development [idiographics]), began to coalesce, at least to some degree, around a typology that provided both an organizing structure and a reasonable measurement approach. This structure – called the five-factor model or the Big Five – has been related to virtually all applied criteria (e.g., Barrick & Mount, 1991). Independently, meta-analyses of a diverse set of topics caused re-examination of many previously held assumptions — in general, these meta-analyses showed that subjective eyeballing of data across studies generally leads reviewers to overestimate the variability in the data, and underestimate central tendencies. The intersection of these trends – meta-analyses using the five-factor model as an organizing framework – has produced powerful insights into many if not most organizational behavior (see R. Hogan, 2005; Ones, Dilchert, Viswesvaran, & Judge, 2007).

The leadership literature is no exception. In the most comprehensive meta-analysis to date, Judge, Bono, Ilies, and Gerhardt (2002) analyzed 222 correlations from 73 samples. They found that four of the Big Five traits had non-trivial correlations with leadership emergence and effectiveness: extraversion, conscientiousness, emotional stability, and openness to experience. Together, the five traits had a multiple correlation of $R = .53$ with leader emergence and $R = .39$ with leadership effectiveness. The gains revealed by the quantitative review notwithstanding, critics of the trait approach remain.

First, some remain unimpressed by the size of the validity coefficients. In comparing the personality literature to an oft-cited, earlier review (Guion & Gottier, 1965), Murphy and Dzieweczynski (2005, p. 345) concluded, "One major concern was that the validity of personality inventories as predictors of job performance and other organizationally relevant criteria seemed generally low. An examination of the current literature suggests that this concern is still a legitimate one." Andersen (2006, p. 1088) concluded: "The main point is that the relationship (measured as correlation) is low. Consequently, personality has low explanatory and predictive power." Morgeson et al. (2007) went even further, arguing, among other things, that multiple correlations (between an entire Big Five typology and a criterion) are inappropriate, and that personality validities remain so poor as to cast doubt on their utility for organizations.[2]

Another, somewhat related, criticism – of particular relevance to leadership – is that while personality may reveal whether an individual is perceived as leader-like, personality is less than successful in identifying whether those leaders are successful in an objective sense. Kaiser, Hogan, and Craig (2008) criticized the Judge, Bono et al. (2002) and Judge, Erez, Bono, & Thoresen, (2002) study for this (failed) distinction, noting, that the study focuses on "how leaders are regarded and tells us little about leading effective teams" or how such traits "help organizations prosper" (p. 102). Morgeson et al. (2007) also criticize the Judge, Bono et al. (2002) and Judge, Erez et al. (2002) meta-analysis on these grounds, arguing, "Perceived influence is not equivalent to effectiveness, and showing that there is a correlation of a personality dimension with perceived influence does not provide a strong basis for use of this measure to select managers who will be effective" (p. 1044). Though Judge, Bono et al. (2002) and Judge, Erez et al. (2002) did distinguish between leader emergence – who is recognized as a leader of a group – and leadership effectiveness – how well that leader performs in that role, it is fair to conclude that most of the studies they cumulated for leadership effectiveness still relied on subjective evaluations.[3]

Third, its growth and widespread acceptance notwithstanding, there remain general critics of the five-factor model. One prominent critic – Block (1995, 2001) – focused mostly on the inductive origins of the taxonomy, both statistically (limitations in the use of factor analysis) and methodologically (the input into the factor analysis, namely the lexical and questionnaire approaches). Another critic – McAdams (1992) – argued that the selection of five factors is insufficiently justified conceptually and empirically, that the five traits are too broad to provide insights into many aspects of human behavior, and that they are decontextualized accounts of human nature. Further, the five-factor model, based largely on results from studies conducted in Anglo-Germanic languages, has been criticized for not generalizing to other languages and cultures (Salgado, 1997).

Another line of research, that while not necessarily standing in opposition to the five-factor model, argues in favor of either fewer (e.g., Digman, 1997) or more (e.g., Benet-Martinez & Waller, 1997) core factors. Goldberg, for example, despite being a strong advocate of the notion that the most salient individual differences become encoded in natural language (i.e., lexical hypothesis), favors a circumplex model of trait interactions (Abridged Big Five Dimensional Circumplex, AB5C; Hofstee, de Raad, & Goldberg, 1992), whereby blends of the five traits are treated as more valid indicators of personality than the otherwise distinct five factors. Moreover, despite widespread use of the five-factor model, including facets of subdimensions of these factors (see DeYoung, Quilty, & Peterson, 2007), there still is not widespread agreement on the lower-order facets.

Finally, there are other trait perspectives that may be relevant to the topic at hand. For example, Gray's (Gray, 1990; Pickering & Gray, 1999) Reinforcement Sensitivity Theory, with its emphasis on the Behavioral Approach/Behavioral Inhibition System (BAS/BIS), might be argued to be particularly relevant to the leader trait paradigm. There is some evidence that these approaches share similarities: BAS is linked to high levels of extraversion, and BIS to high levels of neuroticism (Smits & Boeck, 2006). The choice of one framework does not dismiss the potential utility of another. We rely largely on the five-factor model because it has

[2] Our mention of these arguments should not be construed as an endorsement. The criticisms are, we believe, somewhat one-sided, unduly harsh, and not representative of most scholars' views. Nevertheless, they are relevant to an appraisal of the leader trait approach, and guide the current effort in some sense.

[3] Objective measures of leadership effectiveness have problems of their own, of course. They may be badly contaminated by extraneous influences, and often present causal inference problems that may be as serious as those underlying subjective appraisals. A correlational analysis relating leader traits (say, of U.S. Presidents) to objective outcomes (American economic and foreign policy performance) is generally full of judgment calls and subjective appraisals of its own, no matter how well considered and conducted (see House, Spangler, & Woycke, 1991).

been shown to be relevant to the leader trait perspective (Judge, Bono et al., 2002; Judge, Erez et al., 2002), but that does not mean we deem other frameworks inappropriate or irrelevant.

With the foregoing review in mind, the purpose of this *Yearly Review* article is to review the leader trait approach, and provide an agenda for future research. In so doing, beyond addressing the above criticisms, we borrow from two recent perspectives in personality research. First, we focus not only on the Big Five traits, but consider the leadership implications of more narrow, but also possibly more powerful, personality traits. Second, we draw from recent thinking on the paradoxical implications of traits for fitness (Nettle, 2006). We do consider the advantages of positively-valenced ("bright") traits and the disadvantages conferred by negatively-valenced ("dark") traits. However, we also consider the possible advantages of "dark side" traits, and the possible disadvantage of "bright side" traits (Judge & LePine, 2007).

Before our specific discussion of traits, we first review several underlying relevant theoretical perspectives. Specifically, we review research on evolutionary theory and evolutionary psychology, behavioral genetics, socioanalytic theory, and other perspectives. These perspectives ground the conceptual model we develop, as well as our discussion of the bright and dark sides of the specific traits.

1. Theoretical perspectives underlying leader trait paradigm

Because the trait approach to leadership, like all theoretical approaches, makes some (often unarticulated) assumptions about human nature, it is important to place the perspective in context. Accordingly, we review three theoretical perspectives that underlie the trait approach: (1) evolutionary theory and evolutionary psychology; (2) behavioral genetics; and (3) socioanalytic theory. These of course, do not exhaust the realm of perspectives relevant to the trait approach. Moreover, because each perspective may be worthy of an article in its own right, our treatment of each perspective is admittedly brief and somewhat superficial. Nevertheless, our goal in providing a brief review is to ground the propositions we offer in our extended model, and to inform our discussion of the positive benefits and potential negative consequences of personality traits.

1.1. Evolutionary theory and evolutionary psychology

Evolutionary theory does many things relevant to the leader trait perspective, including: (1) providing a theory for the existence of certain traits in humans (or other species [Gosling, 2008]); (2) providing an explanation, if only in part, for the efficacy of certain traits; and (3) also providing a prediction, at least in a general form, for trait paradoxes. We consider each of these contributions in turn.

1.1.1. Existence of traits

First, and most obvious, is that evolutionary theory predicts that all species characteristics arise from a process of mutation and selection. Humans have opposable thumbs because those who developed that genetic mutation better survived (where able to make and utilize tools that aided survival). Many (male) birds' feathers have color because it helps them attract females. Evolutionary psychology tells us, however, that psychological traits also developed from mutation and selection. Conscientiousness may have been inculcated in humans because prudence, planning, and diligence aid survival. Agreeableness may exist because it fosters communal attachments and cooperation within and between groups.[4] What we argue here, though, must go further. Specifically, if evolutionary theory is to support the presence of certain traits in leaders, the theory relies on the general premise that such traits facilitate the emergence of leadership, and that such leadership emergence is linked to fitness (i.e., psychological adaptation, or the degree to which a mechanism solves adaptive problems necessary to procreation and survival). Put another way, what we argue, necessarily, is that one of the reasons humans possess certain individual differences is because those differences facilitate leadership, which in turn facilitates fitness. The first link – between four of the Big Five traits and leadership – was already established. We now discuss the second link — between leadership and fitness.

There are two mechanisms by which leaders with the right traits ascend to leadership positions, and enjoy greater fitness in turn. First, it is intuitively obvious – perhaps even a truism – that being a leader enhances opportunities for procreation. Alpha males (and females) have first choice in procreating across many species, and they have more mates; there is little reason to think the situation is much different with humans (Buss, 2009). Enhanced procreation opportunities mean that the genetic material of alpha males and females is more likely to be passed down the ancestral line, meaning that their traits are more likely to become dominant over time. Although all extraverted individuals may have such advantages because they are dominant, sensation-seeking, and affectionate (MacDonald, 1995), extraverted leaders may particularly benefit. Second, leaders with the "right" traits are more fit (i.e., more likely to thrive and survive) because they are in a better position to adapt, and to use adaptation to benefit themselves. While leaders may be in a better position to detect novel or systemic threats to their collective (Van Vugt, Hogan, &

[4] As the reader might imagine, the degree to which certain traits exist due to adaptive fitness is a complicated issue. There is not yet a consensus in evolutionary psychology regarding how mutation and selection work together in terms of producing offsets in personality phenotypes. Some, such as Tooby and Cosmides (1990, 1992), argue that the adaptive fitness of personality traits is either neutral or functionally superficial, and further argue that genetic variation is contrary to adaptation (few humans are born with more than five fingers on each hand, etc.). Others, however, disagree (Buss & Greiling, 1999), on the argument that there is non-genetic sources of variation in personality, or on the argument that adaptability depends on context. We return to this issue later.

Kaiser, 2008), particularly those leaders who are perceptive, prudent, and vigilant, those same skills should aid their own survival as well. Leaders with adaptive traits are also better able to solve another adaptation problem: nourishment. When a prey is caught, the alpha male (or female) is the first, not the last, to eat. When a company is failing, rarely is it the leader who suffers most — hence the presence of so-called golden parachutes (Hirsch, 1986; Wade, O'Reilly, & Chandratat, 1990).

Given the advantages of leadership, one might well ask why anyone would choose to be a follower? After all, if followership means that one is literally placed at the back of the queue for sustenance and reproduction, why not simply chose to be at the front? There are two responses to this question. First, one might assume that followers are making the best of a bad hand. They realize, perhaps subconsciously, that they were not dealt the most favorable hand (i.e., they realize, or are made to see outcomes of dominance-submission episodes, that their traits do not favor their ascension to leadership), and their best chances of survival are to play their cards wisely. Yes, leaders with the "right" traits are favored, but this observation does not address what the rest of us should do when we do not have the "right stuff". Nothing might spell our doom faster than failing to appreciate our limitations. Second, even though in many collectives there is only one leader, in many others, several leaders emerge. Shared leadership – where leadership is distributed among group members – can be an important predictor of group performance (Carson, Tesluk, & Marrone, 2007). In leadership research, too often we have assumed that only one (or a few) leads — a so-called "vertical leadership" approach (Pearce & Sims, 2002). But leadership takes place on many levels: even leaders follow at some point, and followers are often asked to lead. Most collectives thrive and survive based not only on leadership at the top, but leadership at other levels as well. Indeed, as Ensley, Hmieleski, and Pearce (2006) note, the fate of an organization may depend on both vertical (top) and distributed (shared) leadership.

In short, evolutionary psychology predicts that certain traits are in evidence because they present advantages for survival fitness, sexual fitness, or both. The leader trait perspective both informs and is informed by evolutionary psychology in suggesting leadership reasons for the fitness implications of certain traits, and evolutionary theory, in turn, provides a reason why "leaders are not like other people" (Kirkpatrick & Locke, 1991, p. 49).

1.1.2. Efficacy of traits

In addition to supporting the existence of traits, evolutionary psychology also supports or explains their effectiveness. It can be argued that traits become inculcated in a species when they are important to survival. This is particularly true when one compares it to other, narrower characteristics. Conscientiousness is surely a more central characteristic to human survival than are narrower manifestations of the trait, such as fastidiousness or time sensitivity. Moreover, broad traits may be both more heritable and more adaptive than narrower traits. Anyone can be described along a conscientiousness dimension, but fondness for eating dirt would seemingly characterize few individuals.[5] Not all individual differences – MacDonald (1995) cites variation in fingerprint ridge count as one example – have direct fitness implications. Personality traits should be no exception.

The situation should be similar when viewed from the leader trait perspective. The possession of certain traits allows leaders to emerge and to perform their roles well. The absence of certain traits may keep an individual from emerging as a leader at all, or performing well even if she or he does. Implicit in this discussion is the idea that leader emergence is distinct from leadership effectiveness. Evolutionary theory does not presuppose that the traits that exist because they help an individual emerge as a leader (and thereby enjoy greater fitness) are necessarily the same as those that help a leader be effective. It is even possible that the fitness advantages of one set of traits (those traits that foster leader emergence) are greater than the other (those traits that facilitate leader effectiveness).

Moreover, whether traits are linked to leader emergence and leadership effectiveness may depend on context. As adaptive and coordinative problems grow, the premium placed on leadership grows, too. There is little need for prudent, bold, flexible leadership when the collective faces little conflict from within or without, when resources are abundant, and the environment is quiescent. When a harsh winter comes, when a predator or competing collective encroaches, or when business conditions change, leadership may not only be important, it may be the sole path to successful adaptation and survival.

There is also a certain circularity that favors the leader — the better the leader, the more effective his or her group, and the better that group can (and will) protect the leader when threats inevitably arise. Thus, if a leader has traits that enable her or him to chose more able group members, she or he benefits directly as a function of that group member's skills. If the leader also has traits that engender loyalty (unwillingness to leave collective, willingness to fight on behalf of or to protect the leader), then all the better.

There is one other point to be made here. Frequency-dependent selection may operate with leader traits, such as the positive effects of a leader with high levels of a particular trait may increase as others share the trait. It may do a leader little good, for example, to be highly conscientious if his or her followers' lack of conscientiousness undoes every organizing activity he or she plans. Similarly, while cooperation is crucial to group effectiveness and thus leader effectiveness (Hogan & Kaiser, 2005), a leader's tendency to cooperate (as assayed by agreeableness) might well be undone by cunning, devious subordinates who scheme to use his good will against him. It is interesting that R. Hogan, Curphy, and J. Hogan's (1994) analysis of how leaders fail enumerated what might be described as excessive agreeableness ("reluctance to confront problems and conflict") as the primary cause of management failure, and excessive disagreeableness ("tyrannizing their subordinates") as the second most common cause.

[5] We recognize a paradox in this argument: If a broad, generalized trait is heritable and fitness-related, would not selection work how to minimize variation? We address this question in the next section.

Finally, the above examples consider *positive* frequency-dependent selection — when the evolutionary advantages of a trait increase as it becomes more common. However, there is also the possibility of *negative* frequency-dependent selection — where the fitness advantage of a trait increases as it becomes less common. Consider the example of disagreeableness — the highly disagreeable leader may have greater advantage when she is surrounded by agreeable fellow leaders (the proverbial lion with the lambs) than when all are disagreeable. Similarly, within a group, the dominant requires the submissive: If everyone is dominant, one would imagine that high conflict, with little leadership out of the conflict, would ensue.

1.1.3. Paradox of traits

The interaction of species with their environment is rife with paradox. What might lead to fitness at one time or in one set of conditions might become a serious disadvantage at another time or in a different situation. Moreover, survival fitness and sexual fitness often contradict one another: Males sometimes die or are damaged in mating rituals, females' impregnation endangers their survival both pre- and post-partum (Kirkpatrick & Ryan, 1991). Here we focus on three evolutionary paradoxes relevant to the leader trait perspective: (1) the salutary effects of a trait at one time or in one context may be reversed when times or situations change; (2) traits rarely have unalloyed advantages (or disadvantages) even in a single context at a single point in time; and (3) non-linearities in the effect of a trait on fitness or leadership outcomes.

First, a trait that promotes fitness at one time (or in one situation) may become irrelevant or, worse, counterproductive, when situations change. Galapagos finches with small beaks do well when the climate is favorable as they can quickly peck many seeds. However, when drought comes, the situation reverses, and natural selection favors finches with large beaks, so as to better penetrate the barren soil (see Nettle, 2006).

As applied to the leader trait perspective, this paradox suggests a possible mismatch between the traits of leaders and contemporary demands. Evolution is, as judged against the length of lifespan, an extraordinarily long process. The high mutation rate of humans notwithstanding (Penke, Denissen, & Miller, 2007), many if not most characteristics we have today evolved over tens of thousands if not millions of years. Yet compare civilization today against human existence 10,000 years ago — a comparatively very short period of time in human evolution.[6] Just as some characteristics, both physical (e.g., teeth) and psychological (e.g., alertness) might have waned in importance to survival, so might other characteristics become more important (e.g., refinement, demureness) only relatively recently.

In short, the traits we, and our leaders, possess today may not be as well suited to contemporary society and its demands as to the demands of ancient social, economic, and anthropological organization. As Van Vugt et al. (2008) note, "Traits that were adaptive in ancestral environments might no longer produce adaptive behaviors in modern environments, especially when these environments dramatically differ, as is the case with those of modern humans" (p. 191). In short, leadership conditions change quickly, and pose new and complex requirements on leaders (Uhl-Bien, Marion, & McKelvey, 2007) that may be mismatched to our current "stock" of traits.

Second, even when limited to a single environment at one point in time, evolutionary paradox occurs. This form of paradox might be labeled "antagonistic pleiotropy" (Penke et al., 2007), where polymorphisms (i.e., a specific genetic variant or mutation that is discernable) have a positive effect on one fitness-related trait and a negative effect on another. Given the complex set of behaviors that underlie solving adaptive problems (i.e., survival is based on many, many adaptive problems), it would be unusual for a trait to be linked to survival through every conceivable process. As Kirkpatrick and Ryan (1991) note, animals balance two underlying motives in their interactions: mating success and survival. Animals often endanger themselves to mate, and short-term survival is often compromised by reproduction. As extrapolated to the leader trait paradigm, this would suggest that a trait which aids one's ascension to or success as a leader, might in other ways represent threats to one's success or survival as a leader (or the collective that the leader leads).

Adapting this to the topic at hand, these observations suggest that just as certain characteristics may have countervailing effects on fitness, so too might they have similar effects on leader effectiveness. A trusting, gentle, compassionate leader might earn the affection of her followers, but also might be vulnerable to being manipulated or duped by others. A shrewd, scheming, cunning leader might be despised and distrusted by those who know him well, but might gain many advantages at the expense of the uninitiated.

Third, traits may not have linear effects — on fitness, or on leadership outcomes. Comparing two leaders being one standard deviation apart on conscientiousness may mean one thing if both leaders are below the overall conscientiousness mean, and may mean something quite different if both leaders are above the mean. The higher scoring leader might be seen as more dutiful, abiding, and ambitious in the former case, but compulsive, controlling, and ascetic in the latter case.[7] Similarly, bold and assertive actions position oneself to "claim" valuable resources for oneself and one's clan (Ames & Flynn, 2007), and first mover advantages

[6] Primates have existed for at least 85 million years, and the first *homo sapiens* appeared only 200,000–250,000 years ago (Diamond, 2006). Many modern individual differences, such as emergence of light skin color, are much more recent (6000–12,000 years ago) (Gibbons, 2007).

[7] By extremes, we mean values in the tails of a normal distribution. Whether such extremes constitute psychopathology is a question for clinical psychologists. Our concern here is whether a 10% difference in a trait means the same thing at the middle of a trait's distribution as in the tails of the distribution (with the distribution being scores of actual or potential leaders). This point notwithstanding, as Widiger and colleagues (Widiger, 2005; Widiger & Trull, 2007) have shown, there is no necessary conflict between psychopathy and extreme scores of "normal" personality measures (personality measures intended for normal populations, or distributions of scores in non-clinical populations).

are often important to group survival (Van Vugt et al., 2008). However, overly bold actions can become foolhardy, and expose oneself or one's collective to unwanted attention, counterattacks, and resource depletion. Thus, certain curvilinearities are to be expected.

Similarly, the fitness implications of traits may be complex, and may be affected by the presence or absence of other traits. The eminent evolutionary biologist Ernst Mayr noted, "The genotype…is always in the context with other genes, and the interaction with those other genes make a particular gene either more favorable or less favorable" (Diamond, 2001, p. 39; see also Mayr, 2001). A genotypic predisposition toward conscientiousness may reveal a phenotypic manifestation in many different ways, perhaps depending on the presence of other traits. Whether the conscientious leader is effective may depend on how that conscientiousness is expressed.

1.2. Behavioral genetics

Genetic sources of personality traits are now so well established that one might reasonably call it a law (Turkheimer, 2000): We know of no broad personality trait for which there is not a significant genetic source, or, in Turkheimer's (2000, p. 160) first law: "Everything is heritable."

It is quite true that, at least to some extent, leaders are born in the sense that identical twins reared apart share striking similarities in terms of their leadership emergence. Numerous studies now show that various measures of leadership – from indicators of leader emergence (leadership offices held) to leadership effectiveness measures (measures of transformational leadership behavior) – show significant heritabilities, often in the 30%–60% range (Arvey, Rotundo, Johnson, Zhang, & McGue, 2006; Johnson, Vernon, Harris, & Jang, 2004; Johnson et al., 1998). A significant part of the heritability of leadership is no doubt due to the heritability of individual differences associated with leadership (Ilies, Gerhardt, & Le, 2004).

There are a couple of other relevant points to make sure. First, though most estimates suggest that roughly half of the variance in personality is heritable (Bouchard & Loehlin, 2001), that does not necessarily mean that the other half is environmental in the sense that this variance is reducible to a set of conditions. To be sure, some of the unexplained variance is environmental, but researchers have struggled mightily to find environmental variables that explain much of the unexplained variance, leading to a "gloomy prospect" (Turkheimer, 2000): the non-shared variance may be highly idiosyncratic.

Second, it is important to recognize that even seemingly situational variables often have a genetic source. Research by Plomin and colleagues has found that various environmental measures – including both the child's household rearing environment (Butcher & Plomin, 2008) and his or her classroom environment (Walker & Plomin, 2006) – are rather strongly related to genes. Plomin labels this "the nature of nurture" and its implications for organizational behavior in general, and leadership research in particular, should not be underestimated. People are not placed into their environments randomly (at least fully randomly). People's genes cause them to select themselves into, or to be selected into, different environments, and people with similar genes find themselves in similar environments. Failure to account for this effect leads to many possibly erroneous causal inferences.

Third, genes interact with the environment, and cannot and do not exist independent of the environment. For example, if conscientious people live longer because they exercise more, use fewer drugs, and take fewer life-threatening risks (Bogg & Roberts, 2004), how are genes and the environment separable? Ilies, Arvey, and Bouchard (2006) cite an analogy offered by Olson, Vernon, Harris, and Jang (2001, pp. 845–846) in noting the inseparability of genetics and the environment: "Asking how much a particular individual's attitudes or traits are due to heredity versus the environment is nonsensical, just like asking whether a leaky basement is caused more by the crack in the foundation or the water outside. In a very real sense, genetic effects are also environmental because they emerge in an environment, and environmental effects are also genetic because they are mediated by biological processes."

It is reasonable to ask how evolutionary theory and behavioral genetics can be reconciled. After all, if a phenotype is helpful to reproductive success or survival, then variation in that trait should become attenuated over time as those who are low on the characteristic are disproportionately selected out. Put another way, if mutation adds variation, then evolution removes it (by selecting out those with counter-adaptive variation).

Evolutionary selection, however, has its own process, and there are various reasons why genetic individual differences persist (Penke et al., 2007). First, there is *selective neutrality*, where selection is blind to an individual difference (i.e., the characteristic is unrelated to fitness). One might, for example, observe characteristics in some leaders (say, sensitivity to criticism) that say little about their effectiveness or their evolutionary fitness. Second, there is *mutation–selection balance*, where selection does not perfectly eliminate the individual difference, often because the nature of the context has changed (i.e., some of the characteristics that led to fitness in the early stages of humanity may not apply to fitness in contemporary life). Third, there is *balancing selection*, where selection itself maintains genetic variation (i.e., a characteristic may be positively related to fitness in some environments or contexts, and negatively related to fitness in others). There are also more complex mechanisms that allow genetic mutation and evolutionary adaptation to maintain individual differences. One possibility was mentioned earlier: frequency-dependent selection, where the fitness implications of a particular trait depend on its prevalence in other members of the species (see Ilies et al., 2006). The benefits of psychological collectivism, for example, may accelerate as collectivism in a species or sub-population increases (i.e., the payoff to collectivism increases as others in one's population are similarly collectivistic [positive frequency-dependent selection]).

What are the implications of behavioral genetics for the leader trait perspective? As noted above, it provides an explanation for why, at least in part, leaders are born. To a significant degree, leadership is rooted in individual genes, namely, their genetic predispositions to have psychological (personality, intelligence) and physical (height, attractiveness) characteristics that

predispose them to seek leadership positions, to be selected by others into such positions, and to thrive in such positions once selected.

1.3. Socioanalytic theory

Socioanalytic theory (R. Hogan, 1983, 1996) concerns the degree to which success and attainment is predicated on individual differences. Relative to other conceptualizations of individual differences, socioanalytic theory is interpersonal, meaning that it is rooted in two assumptions: "People always live (work) in groups, and groups are always structured in terms of status hierarchies" (J. Hogan & Holland, 2003, p. 100). In such group-centric activity, socioanalytic theory holds that individuals possess two primary motives: getting along (communion), and getting ahead (agency). Research has suggested that these motives are closely linked to personality, such that agreeable individuals are motivated to get along with others, and conscientious and extraverted individuals are motivated to get ahead (Barrick, Stewart, & Piotrowski, 2002).

The latter motive – getting ahead – is easier to link to leadership outcomes than the former (getting along). While it is difficult to envision emerging as a leader if one is absent cooperative tendencies, it is also easy to envision an individual being so agreeable as to be seen as subordinate. Moreover, while a leader's hostile intentions may sow the seeds of conflict both within and between groups, one can also easily envision a leader so cooperative that he or she is unable to quell dissent, challenges to his or her leadership, or threats from competitors for resources. To be sure, one can see a leader being undone by pursuing status with too much ardor or at the expense of ethics (into which they often draw their followers [Uhl-Bien & Carsten, 2007]). Though these outcomes happen, they are accompanied by rewards richly reaped by outsized ambitions. Conversely, it is difficult to see situations in which leaders emerge from among those of whom have little ambition for success or status.[8]

Beyond its focus on status-striving, socioanalytic theory is relevant to the leader trait perspective in an even more fundamental way. Socioanalytic theory makes a distinction between identity and reputation. Simply, identity is how an individual construes him- or herself, while reputation is how that individual is construed by others. Because leadership is inherently collectivistic and therefore dependent on the construal of others, one might well make the argument that reputation is at least as important to leadership as identity. How, though, is this relevant to the leader trait perspective?

First, it suggests a revision in measurement approaches. Identity is best assessed with self-report measures of personality, but reputation is better assessed by observer appraisals (R. Hogan, 2005). Since the vast majority of personality research – and the leader trait research is no exception (Judge, Bono et al., 2002; Judge, Erez et al., 2002) utilizes self-reports – socioanalytic theory suggests that the yield from such research in understanding status-striving (getting ahead) may be more limited than is realized. Second, what is interesting about the socioanalytic approach is that not only does it suggest revisiting the measures of leader traits (most commonly, self-reports), it also suggests revising the measures of leadership outcomes (most commonly, follower-reports). R. Hogan and J. Hogan (2001, p. 40) flatly state, "The ideal way to evaluate leadership…(is) in terms of the performance of the unit for which the leader is responsible." Though not all leadership scholars would agree that there is one ideal way to evaluate leadership, most would surely agree that unit performance is an important – and often unmeasured – aspect of effectiveness. Finally, to the dual-motive approach, R. Hogan and Shelton (1998) added a third motive: finding meaning. As R. Hogan and Shelton (1998) noted, "People want their lives to be predictable, orderly, and sensible, and they fear chaos, randomness, and unpleasant surprises" (p. 130). This third motive has clear implications for leadership, and for the leader trait perspective. What kinds of leaders, or leaders with which traits, provide meaning to followers? If contemporary collective action is predicated on not simply goal articulation, but explanation for the goal, then effective leadership requires more than competing (e.g., setting ambitious goals, and ensuring that the goals are met) and cooperating (e.g., enlisting the support and commitment of followers); it also requires, as research on charismatic (House, 1977) and transformational (Bass, 1985) leadership tells us, inspiring followers to strive toward a purpose that has meaning and the promise of fulfillment.

2. Conceptual model

Based on the foregoing review, Fig. 1 presents a conceptual model we term the Leader Trait Emergence Effectiveness (LTEE) heuristic model. The model integrates behavioral genetics and evolutionary psychology by showing each as a source of personality. The model also includes Hogan's (R. Hogan, 1983; R. Hogan & Shelton, 1998) socioanalytic concepts as mediators of the effect of leader traits on leader emergence. Following prior leader trait research (Judge, Bono et al., 2002; Judge, Erez et al., 2002), the model distinguishes between leader emergence and leadership effectiveness. Based on criticisms of the leader trait paradigm (Kaiser et al., 2008), it also draws a distinction between subjective leadership effectiveness – follower ratings of leaders, follower affective reactions to leaders – and objective effectiveness – as reflected in group performance, group survival. Finally, the model also suggests various moderating influences: from traits to leader emergence, and from leader emergence to leadership effectiveness.

The model is purposely broad so as to make it flexible. Like Weiss and Cropanzano's (1996) Affective Events Theory, or Mischel and Shoda's (1995) cognitive–affective personality system (CAPS) theory, we believe the model will prove more useful if it

[8] It is possible that the ideal leader is some composite of these strivings, with the functional composition depending on the context. To emerge as leader in a very difficult, turbulent, threatening context may require a greater amount of getting ahead (than getting along). Conversely, in situations in which resources are abundant and threats are minimal, leaders who strive toward communion, or getting along, may thrive.

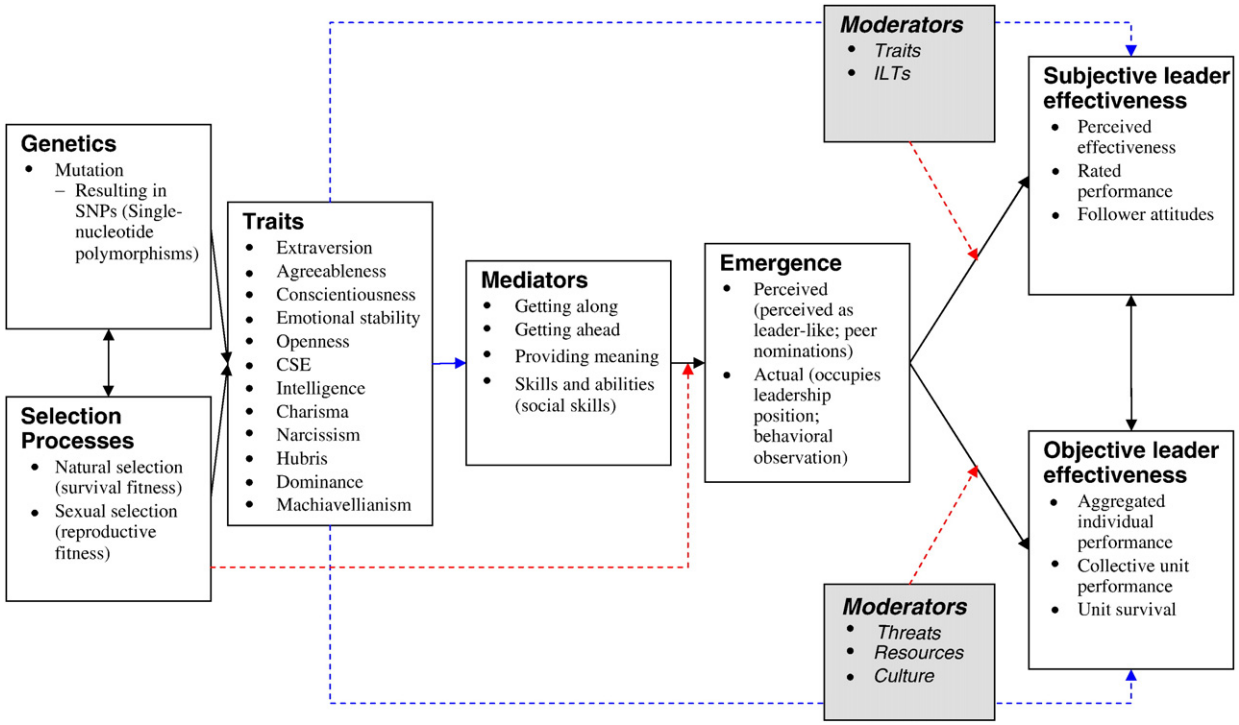

Fig. 1. The Leader Trait Emergence Effectiveness (LTEE) model. (*Notes*. CSE = core self-evaluations. ILTs = implicit leadership theories. Blue lines represent direct effects of leader traits on mediators and subjective and objective outcomes. Red lines represent moderating influences.)

emphasizes breadth and flexibility rather than a rigid specificity. Of course, such breadth comes at the cost of potential vagueness and inarticulation,[9] but, as Shoda and Mischel (2006, p. 441) note with respect to their theory, "CAPS is a meta-theory. A meta-theory provides the requirements for a more specific theoretical model." They go on to note, "The potential power, as well as the challenge, of this meta-theory comes from its ability, and the requirement, to generate a locally optimized, specific theory—a theory that is guided by general principles but that is targeted to the specific problem and goals of interest" (Shoda & Mischel, 2006, p. 442).

Having presented the model in a general sense, we now discuss in more detail the linkages within the model. We organize this discussion into three sections which correspond to the flow of the model: (1) causes of traits; (2) traits, leader emergence, and socioanalytic theory; and (3) leadership effectiveness and moderators.

2.1. Causes of traits

Implicit in the model is a genetic source of traits and, by implications, leader emergence. It assumes that via mutation different genotypes, or single nucleotide polymorphisms (SNPs), produce phenotypic manifestations, the latter of which are reflected in scores on the measures assessing each personality trait. Thus, one might allow that the "Genetics" box provides the genotype and the "Traits" box provides the phenotype, with the specific genotype and phenotype obviously varying by trait. The model does not assume an environmental source of personality, because such sources have been found to be quite small (between zero and 10%, with most estimates closer to zero [Bouchard & Loehlin, 2001]). Turkheimer's (2000) second law is that the environment – in the form of one's upbringing – accounts for a small percentage of the variability in personality. This, of course, does not mean that the environment is wholly irrelevant. As Plomin and Daniels (1987) note, the term non-shared environment accurately depicts a situation in which environment matters, but that environment is idiosyncratic to each individual. However, this may well be a "gloomy prospect" in that such variance is, in traditional nomothetic designs, unexplainable. As Plomin, Asbury, and Dunn (2001, p. 231) noted:

> We also need to consider the gloomy prospect that chance contributes to nonshared environment in terms of random noise, idiosyncratic experiences, or the subtle interplay of a concatenation of events. Francis Galton, the founder of behavioral genetics, suggested that nonshared environment is largely due to chance, when he commented that "the whimsical effects of chance in producing stable results are common enough." (Galton, 1889, p. 195).

[9] Potential interactions between traits, as the agreeableness × conscientiousness example given here, as well as possible curvilinearities mentioned previously (Ames & Flynn, 2007), are examples of the general nature of the model in Fig. 1. Such interactions and nonlinearities are quite consistent with the underpinnings of the model, but are not explicitly modeled for reasons of parsimony.

The model makes a distinction between two evolutionary processes affecting the appearance of traits (and, by implication, the degree to which they explain leader emergence and effectiveness). First, and most obvious, is survival. All animals struggle for survival, and natural selection eliminates those who are not well adapted (or do not adapt well) to their environment. Over time, then, through natural selection, species acquire characteristics that aid their survival. Predators acquire sharp teeth, preys develop evasive instincts, and humans develop cunning and perseverance. Thus, traits come into existence because they have been useful in solving adaptive problems. As noted by Buss (2001, p. 967), "It would be surprising if selection had not designed a complex psychology dedicated to dealing with the complex problems of hierarchy negotiation, including motivational mechanisms, such as status striving and envy of specific others." In other words, variation in personality persists because of genetic mutation, and nature gradually selects in (or out) individuals with the "right" (or "wrong") stuff based on the degree to which the trait is important to survival.

Natural selection is insufficient to account for all individual differences, however. Darwin was first mystified and then irritated by the colorful plumage displayed by many animals. Why would a peacock, for example, have plumage that would only succeed in drawing the attention of predators? Writing a letter to a friend, he complained, "The sight of a feather in a peacock's tail, whenever I gaze at it, makes me sick!" (Darwin, 1860, p. 42). Only when Darwin introduced sexual selection was the puzzle solved: while natural selection favors animals with characteristics that aid survival, so sexual selection aids (through increased propagation) those which reproduce more frequently or productively.

As applied to the leader trait paradigm, what this means is that "leaders are not like other people" (Kirkpatrick & Locke, 1991, p. 49) for both genetic and evolutionary reasons. They become leaders as "extended phenotypes" (Plomin & Asbury, 2005, p. 90) — their genes express themselves in terms of attraction toward leadership. However, they also are selected into such positions based on their genes. Thus, genes determine the expression of traits (as observed in trait measures, of phenotypes), but evolutionary processes, in organizations and in collectives more generally, determine which traits are "selected in" and "selected out."

2.2. Traits, leader emergence, and socioanalytic theory

The middle portion of the model stipulates that traits affect leader emergence. Many – but certainly not all – of these links are confirmed by the Judge, Bono et al. (2002) and Judge, Erez et al. (2002) meta-analysis. The model is not intended to be a comprehensive account of all individual differences that may explain leader emergence and leadership effectiveness. For example, height has been linked to leadership (Judge & Cable, 2004), and might explain some of the genetic source of leader emergence (Ilies et al., 2004).

The mechanism linking leader traits to leader emergence is Hogan's socioanalytic theory (R. Hogan, 1983). Specifically, we posit that the reason these traits result in leader emergence is because, at least in part, of the motives the traits elicit. For example, conscientious, extraverted, and emotionally stable (or high core self-evaluations) individuals may be more motivated to get ahead (Barrick et al., 2002), extraverted and agreeable individuals may be more likely to go along (Barrick et al., 2002), and, more speculatively, open, intelligent, and charismatic individuals may be more likely to provide meaning for their compatriots. Similarly, narcissistic, hubristic, dominant, and Machiavellian individuals may be more likely to get ahead and less likely to get along. How these "dark side" traits affect meaning is unclear.

Impossible to fully depict in the model, but of critical importance to this undertaking, are trait paradoxes. While traits underlie leader emergence and, ultimately, effectiveness, all traits have bright and dark sides, and carry with them evolutionary paradoxes that are often not imagined until revealed. This is an issue to which we return shortly, when we explicitly discuss the bright and dark sides of the traits in the model.

2.3. Leadership effectiveness and moderators

The right-hand portion of the model links leader emergence to two aspects of leadership effectiveness: subjective effectiveness and objective effectiveness. The former are perceived by stakeholders (often followers) and often take the form of leadership ratings, satisfaction with the leader, and other psychological assessments. The latter are "hard" outcomes such as group or organization performance, turnover in the group or unit, and survival of the unit or enterprise. Though R. Hogan and colleagues (R. Hogan & J. Hogan, 2001; R. Hogan & Kaiser, 2005; R. Hogan et al., 1994) argue in favor of the importance of objective effectiveness for leaders, their followers, and for leadership research, we take no such position here. Each is a relevant and important perspective, and each has its own advantages and drawbacks.

The model makes the obvious assumption that one cannot be an effective leader without first emerging as a leader. However, we also posit that these links – from emergence to subjective effectiveness and from emergence to objective effectiveness – are moderated by contextual factors. (Our list of moderator variables is, of course, not exhaustive, and is not meant to be.) We posit that traits moderate the link from emergence to subjective effectiveness, as do implicit leadership theories. Traits – charisma being a good example – might moderate the link from emergence to effectiveness in that some traits not only predispose one to emerge as leader, they also enable one to better translate one's position into effectiveness, at least in the eyes of stakeholders. We do not deny that traits may also work in the same fashion for objective effectiveness, but we do not depict them here for presentation purposes. Similarly, implicit leadership theories (Keller, 1999; Lord, de Vader, & Alliger, 1986) may moderate the link between emergence and effectiveness in that, the more closely a leader's traits match stakeholder prototypes for judging effectiveness, the more effective that leader will be perceived. For example, if a leader is expected to be positive, optimistic, and self-confident, then the more a leader has these characteristics, the more able he or she will be able to translate his or her position into leadership that is perceived to be effective.

As for moderators of the link between leader emergence and objective effectiveness, work in evolutionary psychology (see Wolf, van Doorn, Leimar, & Weissing, 2007, for a review) has revealed that the fitness consequences of traits vary according to shifting environmental conditions such as threats of predation pressure (which, in a business context, might be existential organizational or career threats), resources (i.e., food availability, or economic and business conditions), and social conditions (how collectives are organized). In our model, these are expressed in threats, resources, and culture. These moderators reflect the Darwinistic view that while traits and their expression are central to human existence, ultimately, it is often the environment, in its own seemingly capricious ways, that does the selecting in terms of fitness outcomes.[10]

Thus far, we have not discussed two other aspects of the model. First, the blue lines represent the view that while traits underlie leader emergence, they also affect leadership effectiveness directly.[11] Moreover, the moderator boxes also are affected, at least in some fashion, by the traits. Put another way, even among leaders, we believe charismatic, intelligent, conscientious leaders perform better (i.e., have higher subjective and objective effectiveness). As we noted earlier in the article, even context (or "nurture") is subject to genetic and personological influence (Plomin & Asbury, 2005), and, as Schneider (1987) has noted, the situation is often a function of personality in the sense that people construct their own environments. Second, the model also includes a moderating effect of evolutionary processes in the link between leader traits and leader emergence. That reflects the earlier viewpoint that the environment selects based on traits.

3. Trait effects and paradoxes

As noted in the foregoing sections, many socially desirable personality traits (i.e., "bright"; those viewed positively by most individuals in society) are likely to be valuable for leader emergence and leadership effectiveness in many if not most circumstances. Yet these same traits could be counterproductive in particular contexts or with followers who do not regard these narrow traits as favorable for group survival. Thus, bright traits, albeit favorable for leadership in general, also carry with them paradoxical utility. We would also observe a similar phenomenon for socially undesirable traits (i.e., "dark"; those viewed negatively by most individuals in society), such that these traits might compromise leader effectiveness in general, but actually enhance group survival and fitness in others. Beyond context, where the effectiveness of traits depends on the situation, we could also see similar countervailing effects of bright and dark traits based on the intensity of one's trait disposition, whereby modest levels of a bright trait (e.g., extraversion) are attractive, desirable, and functional for leadership and group effectiveness, but extreme cases of extraversion, characterized in part by risk taking and self-serving pursuit of adventure, might threaten the stability and survival of a particular group.

Thus, our organizing framework for the following section, as shown in Table 1, reflects general and leader-referenced tendencies of bright (socially desirable) and dark (socially undesirable) traits. We discuss four possible implications for leader emergence and leadership effectiveness of traits: (a) socially desirable traits that, in most cases, have positive implications; (b) socially undesirable traits that, in most situations, have negative implication; (c) socially desirable traits that, in particular situations and at extreme levels, have negative implications; and (d) socially undesirable traits that, in particular situations, have positive implications. In so doing, we draw on a person-situation interactionist model of behavior and performance (Tett & Burnett, 2003) to describe the conditions under which particular personality traits relate to leader effectiveness. A complementary examination of the personality-leadership paradigm would consider extremely high or low scores on standard measures of common traits, with discussion of how these scores affect leader effectiveness. We are mindful, however, of the possibility that scores at the extremes could indicate borderline clinical or personality disorders, rather than 'normal' personality traits, and therefore limit our discussion of this phenomena.[7]

We purposely offer our shortest reviews of the bright side of bright traits, as comprehensive examinations of the positive implications of these traits (e.g., Big Five; Barrick & Mount, 1991; Judge, Bono et al., 2002; Judge, Erez et al., 2002) have already been published. Instead, we focus on the three other categories in Table 1. For with the exception of a few critical studies (R. Hogan & J. Hogan, 2001), the dark traits associated with leadership have been widely ignored, and rarely have scholars considered countervailing or non-linear effects of personality (see Ames & Flynn, 2007, for an exception). We do not suppose that our treatment of bright and dark traits is comprehensive, nor do we claim to be the first to conceptualize countervailing or paradoxical effects of personality (see Conger, 1990; R. Hogan & J. Hogan, 2001; Judge & LePine, 2007).

4. Bright side of bright traits

4.1. Conscientiousness

Conscientious individuals tend to be disciplined in pursuit of goal attainment, efficient, and have a strong sense of direction (Costa & McCrae, 1992). These individuals are detailed-oriented, deliberate in their decision-making, and polite in most

[10] We realize, of course, that applying predation pressure and other evolutionary concepts to organizational leadership is a generalization that is, in some sense, metaphorical. However, we believe that evolutionary instincts do not evaporate from the human psyche once they enter organizations. It is true, of course, that the threat of being eaten by a tiger is not the same as a threat of being replaced as a leader, but the entire field of evolutionary psychology depends on a certain generalization of threats, instincts, and responses.

[11] In the model, there are both direct and indirect effects of the traits on leadership effectiveness. The indirect effects are mediated through leader emergence, and reflect the assumption that to be an effective leader, one must first emerge or be recognized as a leader. The direct effects reflect the view that even among those who have emerged as leaders, there will be individual differences in leadership effectiveness that can be traced, in part, to individual differences in traits.

Table 1
Framework for discussion of implications of personality traits for leader effectiveness.

Social desirability	Actual effects in specific context or situation	
	Bright	Dark
Bright	Socially desirable trait has positive implications for leaders and stakeholders *Example*: Conscientious leader displays high ethical standards in pursuing agenda in long-term interest of organization.	Socially desirable trait has negative implications for leaders and stakeholders *Example*: Self-confident (high CSE) leader pursues risky course of action built on overly optimistic assumptions.
Dark	Socially undesirable trait has positive implications for leaders and stakeholders *Example*: Dominant leader takes control of ambiguous situation, and assumes responsibility for the outcome.	Socially undesirable trait has negative implications for leaders and stakeholders *Example*: Narcissistic leader manipulates stock price to coincide with exercise of personal stock options.

Note. CSE = core self-evaluations.

interpersonal interactions (Costa & McCrae, 1992; R. Hogan & J. Hogan, 2001). As such, conscientiousness as a trait is positively correlated with favorable work behaviors such as job performance (Barrick & Mount, 1991) and cooperation in a team context (LePine & Van Dyne, 2001), and negatively correlated with turnover intentions and the desire to commit deviant behaviors (Salgado, 2002). The very nature of conscientiousness implies a link with contingent reward leadership behavior (Bono & Judge, 2004), suggesting that conscientious leaders will clearly and consistently define role expectations and fairly deliver on informal contracts (Bass, 1985). Conscientious leaders will exhibit integrity (J. Hogan & Ones, 1997), more tenacity and persistence in pursuit of organizational objectives (Goldberg, 1990), explaining perhaps, why conscientious leaders foster work climates regarded as fair and just (Mayer, Nishii, Schneider, & Goldstein, 2007).

4.2. Extraversion

Extraverts are most often characterized as assertive, active, energetic, upbeat, talkative and optimistic individuals (Costa & McCrae, 1992). Extraverts experience and express positive emotions (Watson & Clark, 1997), which are revealed in assessments of job satisfaction (Judge, Bono et al., 2002; Judge, Erez et al., 2002) and subject well-being (DeNeve and Cooper, 1998). Their optimistic views of the future allow extraverts to emerge as group leaders (Judge, Bono et al., 2002; Judge, Erez et al., 2002; Stogdill, 1948), to be perceived as "leaderlike" (Hogan et al., 1994), and to exhibit behaviors consistent with the transformational model of leadership (Bono & Judge, 2004). It is therefore no surprise that Bono and Judge (2004) recognized extraversion as "the strongest and most consistent correlate of transformational leadership" (p. 901).

4.3. Agreeableness

Agreeableness is manifested in modesty and altruistic behavior with agreeable individuals being described as both trusting and trustworthy (Costa & McCrae, 1992). As a bright social personality trait, agreeableness is positively correlated with helping behaviors and interpersonal facilitation (Hurtz & Donovan, 2000), performance in jobs involving significant interpersonal relations (Mount, Barrick & Stewart, 1998), and negatively correlated with deviant and counterproductive work behavior (Salgado, 2002). Although some empirical evidence finds a weak correlation between agreeableness and leader effectiveness (Judge, Bono et al., 2002; Judge, Erez et al., 2002), there are several explanations for a more positive association between the two. Agreeable leaders will be cooperative, gentle, and kind (Graziano & Eisenberg, 1997), choosing to be inclusive and promote affiliation while avoiding conflict (Graziano, Jensen-Campbell, & Hair, 1996). As such, agreeable leaders are likely to promote cooperation and helping behavior among team members (Hurtz & Donovan, 2000), be empathetic when delivering critical feedback, and encourage a pleasant, friendly, and fair work environment (Mayer et al., 2008). Agreeable leaders have a genuine concern for the well being of others, are attentive to an individual's psychological needs, and are interested in a subordinate's job satisfaction and professional development. Similarly, Bono and Judge (2004) postulated that agreeable individuals may score high in idealized influence (Bass, 1985) and be seen as attractive role models because of their trustworthy and cooperative nature.

4.4. Emotional stability

Emotionally stable leaders are calm, relaxed, consistent in their emotional expressions, and not likely to experience negative emotions such as stress, anxiety, or jealousy (Judge & LePine, 2007). Emotional stability is associated with subjective well-being (DeNeve & Cooper, 1998), lack of turnover intentions (Salgado, 2002), leadership, and job satisfaction (Judge, Bono et al., 2002; Judge, Erez et al., 2002). Individuals prone to experiencing negative emotions tend to suffer low social status (Anderson, John, Keltner, & Kring, 2001), as emotional stability is regarded as a necessity for effective leadership (Northouse, 1997). Leaders who exhibit emotional stability are likely to remain calm in moments of crisis, be patient with employee development, and recover quickly from group and organizational failures.

4.5. Openness to experience

Those high in openness to experience are intellectually curious (McCrae, 1996), and have the tendency to be creative, introspective, imaginative, resourceful and insightful (John & Srivastava, 1999), regularly engaged in patterns of divergent thinking (McCrae, 1994). These characteristics of openness to experience are expressed in positive work behaviors such as leadership (Judge, Bono et al., 2002; Judge, Erez et al., 2002) and coping with organizational change (Judge, Thoresen, Pucik, & Welbourne, 1999). In their comprehensive meta-analytic review, Bono and Judge (2004) found that open individuals score highly on the intellectual stimulation and inspirational motivation components of transformational leadership, as these leaders have a vivid imagination, are able to challenge conventional wisdom on critical issues, and visualize a compelling future for the organization.

4.6. Core self-evaluations

Core self-evaluations (CSE) is broad personality trait that captures one's bottom-line self assessment, and is comprised of four fundamental judgments — self-esteem, locus of control, generalized self-efficacy and emotional stability (i.e., low Neuroticism; Judge, Locke, & Durham, 1997). These lower order traits are highly correlated with one another (Judge, Erez et al., 2002) and have similar patterns of associations with such outcomes as job and life satisfaction, job performance (Bono & Judge, 2003; Judge, Bono et al., 2002; Judge, Erez et al., 2002), self-determination (Judge, Bono, Erez, & Locke, 2005), task motivation, and goal-setting behavior (Erez & Judge, 2001). Hiller and Hambrick (2005) offer a comprehensive review of the literature linking the core traits and executive leadership, summarizing a study by Miller and Toulouse (1986) by noting that, "executives who have an internal [locus of control] (i.e., feel in control of their fates) are associated with strategies involving innovation and product differentiation" (p. 302), and perform with particular efficiency when pursuing those strategies. Hiller and Hambrick (2005) also suggest that high levels of core self-evaluations in CEOs will be associated with simpler and faster strategic decision processes, a greater number of large stake initiatives, and more enduring organizational persistence in pursuit of those initiatives.

4.7. Intelligence

Fewer individual characteristics are more valued in modern Western society than cognitive ability (i.e., intelligence; Judge, Colbert, & Ilies, 2004; Judge; Piccolo, & Elies, 2004). Because of its robust link to a host of professional (e.g., job performance; Schmidt & Hunter, 2000) and social advantages (e.g., economic self-sufficiency, affluence, educational achievement, marital stability, legitimacy, and lawful behavior; Hernstein & Murray, 1994), intelligence is regarded as the most important trait in psychology (Sternberg & Ruzgis, 1994), and the most "successful" trait in social and applied psychology (Schmidt & Hunter, 2000). Intelligence (i.e., cognitive ability) has been identified as one of the great traits of leadership (e.g., Mann, 1959) and among the most critical traits that must be possessed by all leaders (Judge, Colbert et al., 2004). Intelligent leaders are capable of addressing important issues across a broad spectrum of organizational functions, carefully integrate important (or discard unnecessary) information in critical decision-making, and creatively develop solutions for complex problems.

4.8. Charisma

Charisma is a personal trait is often characterized as a unique and special gift from God (Weber, 1947), and was the central focus of House's (1977) theory of effective leadership. House (1977), as well as Conger and Kanungo (1998), treats charisma as set of behaviors manifest in a broad leadership process, but the core of charismatic leadership theory rests on the notion that a leader's influence on his or her followers is often beyond the legal and formal authority structure of a group or organization, and relies instead on the leader's personal charm, attractiveness, and persuasive communication. According to Weber, charismatic leaders are able to influence followers by articulating a compelling vision for the future, arousing commitment to organizational objectives, and inspiring commitment and a sense of self-efficacy among followers. The positive effects of charisma on individual, group, and organizational functioning is well documented, with hundreds of empirical studies finding that charismatic leaders are able to inspire high levels of performance and encourage deep levels of commitment and satisfaction among followers (Fuller, Patterson, Hester, & Stringer, 1996; Shamir, House, & Arthur, 1993).

5. Dark side of dark traits

5.1. Narcissism

Narcissism is a personality trait that is characterized by arrogance, self-absorption, entitlement, and hostility (Rosenthal & Pittinsky, 2006). Narcissists exhibit an unusually high level of self-love, believing that they are uniquely special and entitled to praise and admiration. As a self regulatory defense mechanism against a grandiose yet shallow self concept (Morf & Rhodewait, 2001), narcissists tend to view others as inferior to themselves, often acting in insensitive, hostile, and self enhancing ways. Narcissist leaders are more likely to interpret information with a self serving bias and make decisions based on how those decisions will reflect on their reputations.

In general, these traits and behaviors translate into awkward interpersonal interactions, with narcissistic individuals lacking empathy, manipulating conservational patterns towards their own interests and accomplishments, and arrogantly fantasizing

about grandiose dreams. As such, a limited but growing body of research identifies some of the negative consequences of leader narcissistic behaviors. Blair, Hoffman, and Helland (2008) found that narcissism was negatively related to integrity and ratings of interpersonal performance, while Van Dijk and De Cremer (2006), in an experimental examination of leadership and social value orientations, found that narcissistic managers were more self serving than their more humble counterparts, with an inclination to allocate scarce organizational resources to themselves. Lastly, whereas narcissistic leaders may be prone to enhance self-ratings of leadership, attractiveness, and influence, these same leaders are generally viewed negatively by others, which reveals itself in lower job performance and fewer examples of organizational citizenship among subordinates (Judge, LePine, & Rich, 2006).

5.2. Hubris

Hubris exists when an individual has excessive pride, an inflated sense of self-confidence, and makes self-evaluations in terms of talent, ability, and accomplishment that are much more positive than any reasonable objective assessment would otherwise suggest. Leaders who carry an exaggerated sense of self-worth are likely to be defensive against most forms of critical feedback (Baumeister, Campbell, Krueger, & Vohs, 2003), and respond to negative feedback by questioning the competence of the evaluator and the validity of evaluation technique (Kernis & Sun, 1994). When subordinates or peers disagree with hubristic leaders, these leaders deny the credibility and value of negative evaluations (Smalley & Stake, 1996), and discount information that is in conflict with their inflated self views. Because they so strongly believe in their own ability to inspire performance and achieve extraordinary economic success, CEOs with high levels of hubris are prone to pay higher than justified premiums in corporate acquisitions (Hayward & Hambrick, 1997). These acquiring CEOs believe that they can accomplish what other less skilled CEOs could not — an attitude that clouds rational decision-making and often translates into reduced corporate valuations and below market stock performance.

5.3. Social dominance

Whereas dominance, along with sociability, is often regarded as a lower-level facet of extraversion (Judge, Bono et al., 2002; Judge, Erez et al., 2002; Roberts, Walton, & Viechtbauer, 2006; Harms, Roberts, & Wood, 2007), in the current paper, we refer to a social dominance orientation ("dominance") as proffered in Social Dominance Theory (Sidanius & Pratto, 2001). Sidanus and Pratto regard social dominance as one's preference for hierarchy and stable status differentials in any given social system. The concept is most often measured with the Social Dominance Orientation scale ("SDO"; Pratto, Sidanius, Stallworth, & Malle, 1994), in which respondents indicate their level of agreement with such items as, "Some groups of people are simply inferior to other groups", "To get what you want, it is sometimes necessary to use force against other groups" and "To get ahead in life, it is sometimes necessary to step on other groups."

Dominant individuals, according to the SDO, prefer to control conversations, put pressure on others, and demand explanations for otherwise normal activities. Early studies in the trait approach to leadership identified social dominance as a means to distinguish leaders from non-leaders (Mann, 1959), but these demanding figures often motivate through fear, and rarely inspire followers with behaviors that are regarded as ethical, supportive, considerate, or fair. In a broad study of personality and authority in families, for example, Altemeyer (2004) found that highly dominating individuals were broadly regarded as prejudiced, power hungry, and manipulative. Indeed, attempts to use dominating influence tactics are regarded as counterproductive (Driskell, Olmstead, & Salas, 1993), whereas as inclusive, ethical, and considerate leader behaviors are widely regarded as effective across a range of outcomes (e.g., motivation; Judge, Piccolo et al., 2004).

5.4. Machiavellianism

Machiavellianism is a term used to define a personality trait characterized by cunning, manipulation, and the use of any means necessary to achieve one's political ends. The term derives from Niccolo Machiavelli, a 16th century author who authored *The Prince*, a treatise on the accumulation and leverage of political power. Although nearly 500 years from the book's original publication, many of the lessons of *The Prince* are as relevant today as they were then. Embedded in Machiavelli's advice, is the encouragement to lie, perceive, manipulate, and forcefully persuade constituents towards a purpose that affords the leader usable political and social power. Leaders described as Machiavellian are politically oriented, seek control over followers (McHoskey, 1999), use tactics of impression management, and avoid motives of organizational concern and prosocial values (Becker & O'Hair, 2007). While these leaders have a natural talent for influencing people (Goldberg, 1999), they can usually talk others into doing things for the leader's personal benefit, clearly abusing power embedded in an organization's formal authority and power captured in the leader's dominant behavior. Any intrinsic meaning of work is lost under Machiavellian supervision, for these kinds of leaders are less willing to adhere to procedure or pursue lofty ethical and moral standards, instead concerned with maximizing opportunities to craft their own personal power.

6. Dark side of bright traits

6.1. Conscientiousness

Highly conscientious individuals tend to be cautious and analytical, and therefore often less willing to innovate or take risks. Cautious leaders, unfortunately, avoid innovation, resist change, and delay critical decision-making processes, hampered by their need to gather compelling information and evidence in support their preferences (R. Hogan & J. Hogan, 2001). Leaders who are

highly conscientious may be threatened by turbulent circumstances and organizational change, and experience stress when impending deadlines and daunting workloads compromise their strong desires to follow strict and organized procedures. Indeed, conscientious individuals tend to be less adaptable to change (LePine, Colquitt, & Erez, 2000), which could result in poor organizational performance, failure to capitalize on organizational resources, or missed opportunities for aggressive investment in new business opportunities.

Further, whereas conscientious individuals may be diligent in their work and attentive to detail, highly conscientious leaders may emerge as perfectionists, inflexible about procedures and policies, and critical of their team's performance (R. Hogan & J. Hogan, 2001). Leaders who are highly conscientious but low on agreeableness, may be abrasive and impersonal with followers when delivering negative feedback (Witt, Andrews, & Carlson, 2004), and although conscientious leaders may be mindful of the preferences of a work group, these leaders may hesitate to make strategic decisions that in anyway oppose consensus opinion. As such, conscientious leaders are unlikely to be perceived as charismatic or inspirational (Bono & Judge, 2004).

6.2. Extraversion

Individuals who are excessively extroverted have a tendency to behave in bold, aggressive, and grandiose ways. They like to be the center of attention, quickly bounce from one conversation or idea to another, and are prone to over-estimating their own capabilities (R. Hogan & J. Hogan, 2001). As such, extraverted leaders may be less likely to solicit input from subordinates and colleagues, potentially alienating organizational members who prefer that attention and credit be shared. Further, extraverted leaders who engage in short and shallow discussions with many people in an organization, might fail to provide a clear strategic focus for followers, ultimately making extraverted leaders hard to please. Lastly, as sensation seekers who maintain short-lived enthusiasm for projects, people, and ideas (Beauducel, Brocke, & Leue, 2006), extraverted leaders may make hasty decisions to pursue aggressive acquisitions or investments, and change course prematurely if returns on such investments do not materialize on an extravert's bold and aggressive schedules.

6.3. Agreeableness

Highly agreeable leaders are likely to avoid interpersonal conflict (Graziano et al., 1996) and be overly sensitive to the feelings and desires of others at work, leading them to avoid decisions that put them at odds with peers and subordinates. Their tendency to be cooperative, accommodating, gentle, and kind (Graziano & Eisenberg, 1997) could result in decision-making that minimizes conflict and seeks the broadest level of approval. Further, agreeable managers are prone to giving lenient performance ratings (Bernardin, Cooke, & Villanova, 2000), which deprives employees of an honest appraisal of their work and likely skews the distribution of ratings in a way could put the company at risk for accusations of wrongful discharge or biases in promotion and compensation decisions (Judge & LePine, 2007). Agreeable leaders who use a non-confrontational style may be ideally suited for positions that demand complacent adherence to the status quo. Thus, it may be unlikely to find highly agreeable leaders proposing radical process innovations or progressive advancements to organizational policy, two potential outcomes of the transformational leadership pattern.

6.4. Emotional stability

Leadership is an inherently emotional process (Dasborough & Ashkanasy, 2002). Leaders who have high levels of emotional stability may be regarded as reserved, laid back, or leisurely, but seldom inject emotion into their relationships with followers and rarely experience emotional highs and lows (Goldberg, 1999). Genuine emotional expressions enhance a leader's credibility (Kouzes & Posner, 2003), fostering his or her potential to garner respect and exert meaningful influence. Although emotionally stable leaders are generally cool headed, failing to express emotion in a given situation could be interpreted as apathy or disinterest.

Followers of leaders who fail to express either positive or negative emotions report lower levels of job satisfaction, trust, and relationship quality, and higher levels of absenteeism and turnover (Farmer & Aguinis, 2005). Unexpressive leaders might conceal their true assessments of individual employees (i.e., offer minimal feedback), leaving those employees uncertain about their standing in the work group. In that vein, unemotional leaders may hamper employees who value frequent interaction with their supervisors, and derive a sense of their own job satisfaction based in large part on feedback they get from supervisors. Leaders with high levels of emotional stability are less likely to use inspirational appeal as an influence tactic (Cable & Judge, 2003), relying instead on objective and rational arguments. In critical or intense situations that demand strong reactions from both leaders and followers, leaders with little emotional expressiveness may be regarded as less credible than those who openly experience emotion, and may be less effective in garnering timely responses from followers.

6.5. Openness to experience

McCrae (1996) characterized individuals scoring high on measures of openness to experience as nonconformists, those who pride themselves on anti-authoritarian and anti-establishment attitudes, while Judge and LePine (2007) considered high openness as a potential hazard in hierarchical, conventional, or traditional work settings. Because open leaders are willing to try most anything in the pursuit of organizational success, these leaders might get easily distracted with vogue ideas, therefore pursuing

short-term strategies that defy deeply held corporate values and traditions, potentially compromising an organization's long term stability. Indeed, openness to experience is negatively correlated with continuance commitment (Erdheim, Wang, & Zickar, 2006). Collectively, followers of leaders who are complex, philosophical, and prone to bouts of deep analysis and reflection, might get frustrated with an open leader's engagements in fantasy and inability to develop a particular position on important issues. Open leaders might lack focus on corporate objectives, regularly speculating on alternative viewpoints and seeking additional perspectives. Thus, while these leaders are creative, intelligent, and reflective, they might alienate followers who need direct, simple, and clear instructions. If a particular situation demands quick and decisive action, leaders prone to abstract and critical thinking will likely compromise a group's opportunity for advancement or survival.

6.6. Core self-evaluations

Because core self-evaluations (CSE) capture one's fundamental judgments about his potential and functioning in the world, extremely positive self-views can have the same adverse effects associated with narcissism and hubris. Hiller and Hambrick (2005) describe this as hyper-CSE, suggesting that overconfidence (hubris) and self-love (narcissism) will reveal themselves in strategic choices of CEOs including product innovation decisions (Simon & Houghton, 2003) and the price paid for an acquired company (Hayward & Hambrick, 1997). While positive self-regard is positive for interpersonal and leadership functioning in general, hyper-CSE will most likely hamper the objectivity of strategic judgments, whereby leaders with hyper-CSE might craft organizational strategies that serve their own best interests, rather than those of the organization's stakeholders.

Altough hyper-CSE shares some qualities with narcissism and hubris, CSE is conceptualized as much broader than both. CSEs do not necessarily reflect pride or excessive self confidence, as does hubris, nor does it reflect entitlement or exploitation, as does narcissism. Hyper-CSE may be related to narcissism and hubris, but the "dark side" behaviors of narcissism (e.g., engaging in arrogant fantasies) and hubris (e.g., dismiss negative feedback) are not apparent in hyper-CSE. We therefore regard these three related but distinct concepts.

6.7. Intelligence

Intelligence is positively associated with both leader emergence and leader effectiveness (Foti & Hauenstein, 1993). Intelligent people have a rich vocabulary, use multi-syllabic words, take genuine enjoyment in reflective thought, and demonstrate mastery over language and communication (Goldberg, 1999; Goldberg et al., 2006). Goldberg (1999) and Goldberg and his colleagues (2006) also portray intellectual individuals as those interested in abstract ideas with a desire to learn deeply within a particular subject matter. However, it is not uncommon for individuals with exceptionally high IQs to be perceived as atypical and treated as outsiders to a work group. Bass (1990) and Stogdill (1948) hypothesized that it could be detrimental to a group if the leader's intelligence substantially exceeds that of group members. This speculation inspired Judge, Colbert et al. (2004) and Judge, Piccolo et al. (2004) to suggest that group intelligence, a group's collective intellectual capacity, would moderate the relationship between leader intelligence and leader effectiveness, such that groups with a high IQ were more receptive to a highly intelligent leader than groups with low IQs. Thus, intellect in and of itself may not be perfectly effective, especially if there exists a mismatch of IQs between group members and the group's leader.

Highly intellectual leaders have a high need for cognition (Cacioppo, Petty, Feinstein, & Jarvis, 1996), which characterizes a person's desire to engage in complex thought. Those who demonstrate a high need for cognition enjoy solving challenging cognitive problems, prefer difficult puzzles, and are concerned why both how and why solutions to problems work (Cacioppo et al., 1996). However, leaders with a high need for cognition might be disinterested or inattentive to simplistic and mundane problems, especially if those leaders view these problems as requiring little to no cognitive effort. It might also be possible that highly intellectual leaders become so enamored with grappling with difficult problems, analyzing alternatives, considering multiple perspectives, that these leaders find themselves hesitating on decisions of urgent concern. Leaders with a high need for cognition may be less effective in situations that demand quick and decisive action.

6.8. Charisma

Charismatic leaders inspire unconditional devotion from followers, who often make public displays of their loyalty, no matter how radical. The positive effects of vision, empathy, and charismatic communication are well documented (Fuller et al., 1996), but in some extraordinary cases, an especially persuasive charismatic leader abuses his or her interpersonal power for self enhancement and personal gain, and exploits followers who are vulnerable to the leader's manipulative appeal (Howell, 1988). Examples of such deviant behavior have been characterized as the personalized, 'dark side' of charismatic leadership (Conger, 1990; Howell, 1988), whereby particularly vulnerable followers in uncertain and troubling situations are prone to offer blind loyalty and passive compliance with a leader's vision, no matter how deviant.

Charismatic leaders tend to emerge when a social situation is conducive to radical change. By articulating a vision of change that embodies shared values and promises for a better future, charismatic leaders encourage enduring commitments from followers, who, being caught in an exceptional leader's magnetic charm, discount any information that contradicts the leader's vision. As such, followers of charismatic leaders tend to think less critically about the leader and their own relationship with him or her, leaving them subject to manipulation and exploitation. Because they are skilled and animated public speakers, charismatic leaders have the ability to deliver powerful speeches, often using rhetoric, imagery, anecdotes, and fantastic claims. This

communication pattern, however, is used to distract cynical followers from consideration of negative information and create an illusion of competence and control (Conger, 1990). In this way, personalized charismatic leaders abuse the interpersonal power they are afforded by willing and submissive followers.

7. Bright side of dark traits

7.1. Narcissism

Narcissistic individuals maintain exaggerated views of their own self worth, but the multidimensional trait appears to have some positive associations in the leadership process. The authoritative component of narcissism (Emmons, 1984) predicted ratings of leader emergence in four-person leaderless discussion groups (Brunell et al., 2008). Deluga (1997), in an archival analysis of U.S. Presidential personalities, suggested that narcissistic entitlement and self sufficiency was positively associated with charismatic leadership and ratings of executive performance. In a field study of 300 military cadets, the best rated leaders were those who were high in egotism and self-esteem, two positive aspects of a narcissistic personality (Paunonen, Lönnqvist, Verkasalo, Leikas, & Nissinen, 2006).

Narcissistic leaders are prone to engage in activities and conversations that enhance their own self images, but while narcissists have an enduring need for approval and admiration, social approval "has been identified as a motive for gaining consensus in political and influence processes associated with [both transformational and] transactional leadership" (Sosik & Dinger, 2007; p. 148). Thus, to reduce ego threatening conflicts, narcissistic leaders may modify the nature and pattern of interpersonal interactions to preserve (and control) the positive impressions they seek to make on others (Leary & Kowalski, 1990). In addition, when organizational goals and leadership assignments are ego-centric, offering the opportunity for narcissists to compare themselves favorably with others or with previous standards, narcissistic leaders are likely to report more enjoyment and more positive affect associated with the assignment (Morf, Weir, & Davidov, 2000) and less apprehension about pursuing the challenge.

Lastly, narcissistic leaders favor bold, aggressive, and magnanimous actions that are likely to draw attention to their vision and leadership. This preference has implications, sometimes positive, for firm strategy and performance. Chatterjee and Hambrick (2007), for example, used an unobtrusive measure of narcissism among 111 CEOs and evaluated strategic innovation and performance over a 12-year period. Narcissism was positively related to the number and size of corporate acquisitions, a benchmark the authors regard as a proxy for strategic dynamism. Although these narcissistic CEOs ultimately achieved organizational performance that fluctuated over time, their firms' performance was essentially no different from those with less self aggrandizing leaders.

7.2. Hubris

Similar to narcissism, hubris is characterized in part by high self-esteem and pride, and the tendency to enhance one's own positive impression on others. Individuals with high self esteem tend to be likable and attractive, and more willing to speak up in groups (Baumeister et al., 2003), a behavior that often results in the emergence of leadership. According to Zuckerman & O'Loughlin (2006), those prone to self-enhancement are more readily able to maintain their levels of efficacy and self-esteem when faced with a difficult challenge. As leaders, those with hubris are likely to project power, strength, and authority in difficult situations, inspiring confidence among their followers and peers. Indeed, hubristic entrepreneurs are more likely to act with confidence and commitment, move quickly to innovate and form new ventures (Hayward, Shepherd, & Griffin, 2006), and test the limits of their organization's productive capacity.

7.3. Social dominance

Dominance was among the first traits associated with leadership and leader emergence (Mann, 1959). Dominant individuals command the attention and respect of others, consistently attain high levels on influence (Anderson & Kilduff, 2009), and behave in ways that make themselves appear competent, even when they are not. As such, individuals who get high scores on ratings of dominance are more likely to emerge as leaders and more likely to be promoted to positions of authority (Foti & Hauenstein, 1993; Son Hing, Bobocel, Zanna, & McBride, 2007). In addition, socially dominant leaders display a strong desire for achievement and control (Cozzolino & Snyder, 2008), making them attractive to willing followers. Anderson and Kilduff (2009), for example, argued that trait dominance is associated with the appearance of competence, which may explain why Hare, Koenigs, and Hare (1997), in a field study of 260 managers, reported that both managers and coworkers, regardless of gender, believed that 'model' managers should be more dominant than they are usually rated to be.

7.4. Machiavellianism

Although most 20th century descriptions of Machiavellianism describe a method of management that is cunning, manipulative, immoral, and comfortable with the use of brute force (e.g., Barker, 1994), the original discussions of power contained in *The Prince* (*Il Principe*) are far less vial than commonly described. Indeed, lessons from the original works are as relevant today as they were in 16th Century (Galie & Bopst, 2006). Machiavellians aspire to positions of management and formal authority, tend to have a high

motivation to lead (Mael, Waldman, & Mulqueen, 2001), and are willing to invest in their own social capital for the sake of achieving their goals. Managers who have a strong need for social power are willing and able to use a variety of leadership and influence tactics, attending carefully to the subtle idiosyncratic psychological preferences of their targets (Bass, 1990; Yukl, 2002). In this way, Machiavellian leaders are very strategic in their thinking, able to navigate power dynamics in complex business and governmental organizations.

In particular, high Machiavellian leaders show considerable flexibility in handling structured and unstructured tasks, are directive and are often described as charismatic (Deluga, 2001; Drory & Gluskinos, 1980). In addition, they engage in a variety of influence tactics conducive to building political connections which may include strategic self-disclosure (Dingler-Duhon & Brown, 1987). As such, they seek out positions that provide extensive resources and means of controlling others particularly within management and law (Corzine, 1997; Dahling, Whitaker, & Levy, 2009; Fehr, Samson, & Paulhus, 1992).

Simonton (1986) demonstrated that Machiavellians tend to serve the most years in national elective offices and were also positively associated with numerous legislative behaviors. In a study on presidential personality, Machiavellian presidents were positively associated with the total number acts passed during their administration, total number of legislative victories and lowest number of defeats over administration-sponsored bills in Congress (Simonton, 1986). Such behavior from leaders carries with it the potential to positively affect countless followers should such legislation prove to be beneficial both for the Machiavellian leader and his/her followers. Simonton (1986) added that Machiavellian presidents were particularly effective when they also demonstrated intellectual brilliance.

8. Conclusions

The leader trait perspective has had a long intellectual tradition, with decades of great prominence in the literature followed by years of skepticism and disinterest. The trait approach had been criticized for its simplicity and futility, for its failure to explain the sources of trait development, and for its inability to adequately integrate context into the perspective's utility. Recent advances in personality research, however, including the development of comprehensive and valid trait frameworks, have inspired a reassessment of previously held assumptions about the role of individual differences in leadership, and sparked renewed interest in trait approaches to understanding leader emergence and leadership effectiveness. So too have advances in evolutionary thinking in organizational behavior research (see Ilies et al., 2004, 2006), and behavioral genetics (see Nicholson, 2005; Nicholson & White, 2006) inspired our thinking in general, and our model in particular.

In this paper, we attempt to place the leader trait perspective in the context of supporting intellectual traditions, including evolutionary psychology, behavioral genetics, and socioanalytic theory. Each of these approaches to understanding individual differences inform our examination of how personality traits develop, how traits are selected in an evolutionary sense, how traits enhance (or compromise) leader emergence and leadership effectiveness, and how traits are subject to countervailing effects, associated with positive outcomes in some circumstances but negative outcomes in others. In so doing, we recognize the interplay of traits and context, describing both the positive and negative consequences of socially desirable (and undesirable) traits. Finally, we propose a Leader Trait Emergence Effectiveness heuristic model integrating the genetic and evolutionary sources of trait development, as well as leadership motive and emergence processes in the associations between traits and both subjective and objective measures of leader effectiveness.

While it is our hope that the model and arguments advanced in this paper contribute to the conceptual foundations of the leader trait paradigm, we also hope that our efforts might spur future research. Though we do not agree that the trait paradigm has produced weak results, we are mindful of the critics who believe otherwise (Morgeson et al. 2007, Murphy & Dzieweczynski, 2005). Whether one sees the yield from leader trait paradigm as meager, we believe that tests of the bright and dark sides of leader traits generally, and of the moderating and mediating links in the model specifically, stand the promise of showing that, in many theoretically appropriate situations, the link between leader traits and leadership emergence and effectiveness is quite significant.

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