Leader Effectiveness in the Eye of the Beholder:

Self-Affirming Implicit Policies in Leader Perception

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ABSTRACT

The present study employed a novel approach to extend current knowledge of how ideal leader prototypes and self-concepts solely and dually influence leader categorization and effectiveness judgments. Cluster analysis and policy-capturing were employed to examine independent and dependent variables as patterns. Findings partially supported hypotheses and corroborated previous research. Leader categorization and effectiveness judgments were self-affirming across multiple managerial performance scenarios; implicit policies varied based on the pattern of traits exhibited within their self-concepts and ideal leader prototypes. On average, people who endorsed prototypical ideal leader prototypes and self-concepts were more stringent compared to individuals with less prototypical patterns. They categorized fewer managers as leaders, perceived them as less effective, and weighed Planning, Motivating, and Controlling performance behaviors more in their judgments. The study also showed ideal leader prototypes explained variance in implicit policies for leader categorization and effectiveness beyond the variance accounted for by self-concepts; however, the self-concept remained a significant predictor of implicit policies for leader effectiveness. This novel finding suggests the self-concept, like the ideal leader prototype, is relevant in weighting performance behaviors for effectiveness judgment.

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I. INTRODUCTION

A common thread and driving research question is what makes a leader and further what makes a leader effective (Meindl, Ehrlich, and Dukerich, 1985). In differentiating leaders from non-leaders or effective leaders from ineffective leaders, the answer often encompasses aspects of leader traits and behaviors or their weaknesses and strengths (Avolio & Bass, 1995; Bennis, 1991; Judge, Bono, Ilies, & Gerhardt, 2002; Lord, Foti, & DeVader, 1984). This requires we study leaders holistically. For example, a transformational leader is likely to be highly considerate, moderately to highly extraverted, and minimally dominant. On the other, an authoritarian leader is likely to be minimally considerate, extremely extraverted, and maximally dominant (Judge & Long, 2012; Judge et al., 2002). It is the interaction of traits that define and distinguish leaders, rather than the level at which one trait is displayed in isolation (Foti, Bray, Thompson, & Allgood, 2012; Magnusson & Bergman, 1990).

Many theories of leadership assert that both leaders and followers are central to leadership processes (Meindl et al, 1985; Shamir, 2007). This perspective has long argued that followers and leaders mutually interact to create dynamic leadership processes through their perceptions of and reactions to each other. Thus, an understanding of leadership-relevant knowledge requires the consideration of followers' assumptions and information processing. As a socially constructed phenomenon, followers possess different biases resulting in different perceptions of the same leader. These personal biases may result from the followers' ideal leader prototypes and self-concepts (Lord et al., 1984; Lord & Maher, 1991; Schyns & Sanders, 2007; Shondrick, Dinh, & Lord, 2010). Thus, differences in leader perception may be a function of how

followers define leadership (i.e., their ideal leader prototype) and/or how followers see themselves (i.e., their self-concepts). The latter becomes more relevant given the leader category is efficacious, which provides self-evaluative information that affirm self-concepts.

A concerted research effort began to study these individual differences between followers as predictors of variation in leader categorization and effectiveness judgments (Lord, Brown & Freiberg, 1999). Research findings in the leadership domain confirmed people used leader prototypes to categorize and judge potential leaders they encounter (Lord et al., 1984; Lord & Emrich, 2001). On the other hand, literature on social evaluation confirmed the role of self-concepts. Specifically, people articulate self-affirming definitions of social traits and categories like leadership. In addition, research findings have shown people judge others in accordance with their self-affirming trait definitions (Dunning & Hayes, 1996).

Only a small amount of research, however, has investigated the simultaneous effects of the ideal leader prototype and self-concept on leader judgments (Bray, Thompson, Allgood, & Foti, 2012; McElwee, Dunning, Tan, & Hollman, 2001; Robson, 2007). People's self-concepts and views of social categories such as leadership are intertwined, with the potential to color their judgments of both who qualifies as a leader and the effectiveness of the leader (Dunning & McElwee, 1995; Dunning et al., 1991). For example, a person-oriented follower is more likely to define their ideal leader in terms of person-oriented traits and therefore prefer a leader who displays more person-oriented behaviors (e.g., the transformational leader) over a leader who displays more task-oriented behaviors (e.g., the transactional leader); one would expect the converse

from a follower who is more task-oriented. In defining and judging leadership in the image of one's self-concept, the follower claims his/her self to be a leader.

The purpose of the present study was to build upon prior research showing theoretically relevant trait patterns for the ideal leader prototype and self-concept exist (Foti et al., 2012) and to examine the interrelationships among the ideal leader prototype, self-concept, and leader categorization and effectiveness judgments using a pattern-oriented approach (Bray et al., 2012; DeRue & Ashford, 2010; Schyns et al., 2011). The study first identified the unique interactions of traits within the ideal leader prototype and the self-concept, which compose theoretically relevant patterns or images of leaders and self-concepts. The role of the self-concept in leader definition was examined by assessing individuals' ideal leader contingent on the image they held of themselves.

The study then described information processing strategies displayed across the judgment of multiple leaders in terms of the emphasis placed on different performance behaviors; in essence, implicit policies for leader categorization and effectiveness judgment were derived (Hobson, Mendel, & Gibson, 1981). Finally, the self-affirming nature of implicit polices was investigated by assessing the extent to which individuals weighed managerial performance behaviors across judgments differed based on the pattern of traits exhibited within the ideal leader prototype and self-concept. This approach addressed the core argument of the similarity hypothesis by illustrating how individuals assess leader behaviors that are similar to those reflected in their ideal leader prototypes and self-concepts in order to form judgments about who is a leader and how effective they are.

In the following sections, I reviewed how the self-concept and the ideal leader prototype are interrelated and imparted in the leader perception process. First, I explained Leader Categorization Theory. Second, I explained the role of the self-concept and the role of the leader prototype in leader judgment, detailing how each individual difference variable impacts leader categorization and effectiveness judgment. Lastly, I outlined the statistical and methodological approaches of the pattern-oriented approach in light of their contributions to testing the interrelationships between the self-concept, ideal leader prototype, leader categorization, and effectiveness judgments.

II. LITERATURE REVIEW

Leader Categorization Theory (LCT)

The traditional view of a leader as a person exerting downward influence over followers has made way for the view of leadership as a mutual influence process between leaders and followers (Shondrick et al., 2010). As a socially constructed phenomenon, leadership requires that one be perceived as a leader by others in order to lead (Lord, Foti, & De Vader, 1984; van Quaquebeke, van Knippenberg, & Eckloff, 2011). The leader's influence or power largely depends on how followers perceive and receive the leader (Shondrick et al., 2010). One must acknowledge follower perception as central to the leadership process. Understanding perceptions yields insight into how or why individuals gain and maintain leadership.

LCT examines leader perception through a cognitive lens. LCT considers the perceiver an active processor of stimulus information rather than a passive receiver of stimulus characteristics; thus LCT recognizes the importance of both stimulus and perceiver characteristics in leader perception (Lord et al., 1984). The theory argues

leader perception entangles the leader's traits and behaviors with follower's cognitive structures including their self-concepts and leader prototypes (Dunning & Hayes, 1996; Lord & Emrich, 2001). These cognitive structures have consequences for perception, behavior, and the leader-follower relationship (Shondrick et al., 2010).

LCT describes the way in which perceivers determine whether an encountered person is a leader or not. LCT considers categorization a primary cognitive process preceding the formation of subsequent leader judgments (Cronshaw & Lord, 1987). The process of leader categorization entails both top-down and bottom-up processing (Shondrick et al., 2010). Bottom-up processing is considered 'data-driven' because it entails the careful assessment of the leader's behaviors and traits; whereas top-down processing is considered 'theory-driven' because the follower's theory or image of a leader drives the judgment.

Perceivers rely on both data and theory in leader categorization because they seek out a match between the two (Shondrick et al., 2010; Lord et al., 1984). A match between the target's behavior and the behaviors the follower associates with a leader results in the target being categorized as a leader; a mismatch results in the target being categorized as a non-leader. Once the target is categorized, the category is stored in long-term memory. Thus, the purpose of categorization is to encode targets as leaders or non-leaders for future reference. The leader category is typically associated with effectiveness while the non-leader category is associated with ineffectiveness. Cronshaw and Lord's (1987) findings showed targets were rated higher on leadership impression when they displayed a greater number of behaviors associated with leaders.

The categorization process has important implications for leader perception. First, categorization depends on what the perceiver believes to be prototypical (i.e., the perceiver's image of a leader). Second, categorization depends on how prototypical a target's behavior is (i.e., the match between the target and the perceiver's image of a leader). This means whether or not a target is perceived to be a leader in addition to how effective the target is perceived to be is determined by the follower and therefore varies across followers (Lord et al., 1984; McElwee et al., 2002; Schyns & Schilling, 2010). Thus, categorization implicates the role of the ideal leader prototype as well as the self-concept.

The Ideal Leader Prototype

The leader prototype is the implicit theory people have about leaders; it is a cognitive structure held in long-term memory that embodies the traits and behaviors an individual associates with 'leader' (Schyns, 2006; Mauer and Lord, 1991). The leader prototype represents an abstraction informed by culminating exemplars and experience yet a clear, relatively stable benchmark (Higgins, 1987; Lord et al., 1984). The ideal leader prototype is one's image of an ideal leader and the standard by which an individual judge encountered leaders. Ideal leader prototypes embody the characteristics one believes leaders should possess and thus play a greater role in judging effectiveness (Barsalou, 1985). Because 'leader' is an efficacious category, ideal leader prototypes are more pertinent to the study of self-concepts, considering the self-esteem maintenance literature.

People rely on their ideal leader prototype to aid in information processing required for leader categorization and effectiveness judgments. According to LCT, all

perceivers evoke their ideal leader prototype to judge persons they encounter. The more the target's behaviors resemble one's ideal leader prototype, the more likely the target is categorized as a leader and in turn, is rated as more effective (Lord, et al., 1984). Nye and Forsyth (1991) experimentally demonstrated subjects showed a clear bias in effectiveness ratings in favor of leaders who matched their ideal leader prototype; subjects who felt an effective leader should be warm, positive, and friendly were biased toward socio-emotional leaders while others who endorsed prototypes that deemphasized friendliness were more were biased toward task-oriented leaders.

Individuals hold similar traits for leaders within their prototypes; however, these traits are endorsed at varying levels, which form different patterns across individuals (Epitropaki & Martin, 2004; Lord et al., 1984; Offermann, Kennedy Jr. & Wirtz, 1994). For example, the most recent study dedicated to capturing the structure of leaders prototypes concluded there were six dimensions: Sensitivity, Intelligence, Dedication, Dynamism, Tyranny, and Masculinity (Epitropaki & Martin, 2004). Sensitivity, Intelligence, Dedication, and Dynamism were distinguished as prototypical factors while Tyranny and Masculinity were considered anti-prototypical. Foti et al. (2012) found while all individuals may possess these traits within the prototype, the pattern of traits that make up ideal leader prototypes differ across perceivers; some individuals preferred a more participative leader (e.g., higher Sensitivity and lower Tyranny) while others preferred a more autocratic leader (e.g., lower Sensitivity and higher Tyranny). Upon conducting a qualitative analysis of leader conceptualizations, Schyns and Schilling (2010) showed leader prototypes varied greatly from one person to the next.

These findings are replicated when other social categories are examined (Barsalou, 1987; Beck, McCauley, Segal, & Hershey, 1998; Dunning, Perie, & Story, 1991). For example, Barsalou (1987) found substantial variation in prototype ratings when subjects were directed to consider social categories such as dominance or submissiveness. Dunning et al. (1991) argued the self-concept explains variance in social categories (i.e., ideal leader prototype) because they tend to differ in a self-affirming manner.

The Self-Concept

The self-concept is often referred to as a theory of oneself or personality (Markus & Cross, 1990; Oyserman, 2001). "As a theory, the self-concept is made of the current state of knowledge about the self and is assumed to be veridical enough to help organize experience, focus motivation, regulate emotion, and guide social interaction. It is not assumed to reflect some absolute truth about one's skills, abilities, competencies, or worth" (Oyserman, 2001, p. 502-503). The innate human desire to feel good about oneself is reflected in the self-concept, which shapes experience by guiding what individuals attend to and how they interpret it (Maslow, 1954; Oysterman, 2001; Rosenberg, 1986).

Although the self-concept is argued to have different levels of identity, the personal level is the most characteristic of studies of the self in Western psychology (Brewer & Gardner, 1996). At the personal level, the self-concept is defined as the totality of individuals' thoughts and feelings about themselves regarding what traits or attributes they associate with themselves and how those attributes and traits make them different from others (Brewer & Gardner, 1996; DeRue & Ashford, 2010; Oyserman, 2001; Rosenberg, 1986).

There are an abundance of theories and models explaining how the self-concept influences judgment of others including social comparison theory (Festinger, 1954), cognitive dissonance theory (Festinger, 1957), self-expectancy theory (Aronson, 1969), and self-evaluation maintenance model (Tesser, 1988). Although different in some respects, these models are similar because they all propose people compare themselves to others or some standards with subconscious motives to maintain positive self-concepts (Tesser, 2000; Dunning, 2003). Some of the aforementioned models propose such motives arise in efforts to maintain self-consistency while others posit these motives arise for self-enhancement as defined in relation to goals and values (Dunning, 2003; Higgins, 1987). Whatever the case may be, people actively engage in cognitive processes that allow them to satisfy these egocentric motives in their judgment of others.

Social judgment is inherently comparative (Dunning & Hayes, 1996; Higgins, 1987). For example, to say someone is intelligent is to say he/she exhibits associated behaviors to a degree deemed equal to or greater than some norm or standard often informed by the people one knows, people in general, or against some absolute standard (Dunning & Hayes, 1996). Most familiar and most frequently thought of, the self is easily brought to mind as the comparative standard in social judgment; research shows the self-concept is pervasively used as a basis for social judgment because self-concepts are among the most accessible, frequently activated cognitive structures (Dunning & Hayes, 1996; Srull & Wyer, 1979). People actively tailor their definitions of social categories and manage and their judgments of others to maintain positive impressions of the self. Thus, the standard one holds for intelligence and the emphasis one places on

intelligence in judging others partially will be determined by how intelligent one views him/her self (Dunning et al., 1991; Dunning & Hayes, 1996).

Self-Affirming Leader Definition

Individual differences in definitions and prototypes of social categories tend to differ in a self-affirming manner. People tend to endorse self-descriptive attributes as most central to their definition of a desirable social category whereas people do not view self-descriptive attributes as prototypical when the social category is undesirable.

Assuming leadership is considered efficacious (Meindl et al., 1985), individuals construct ideal leader prototypes similar to how they view themselves (Dunning et al., 1991, Studies 3 & 4; McElwee et al., 2001, Study 3). Several researchers have supported the assertion "the ideal leader is analogous to the self" (Keller, 1999, p. 591). Dunning and colleagues empirically demonstrated these egocentric tendencies in a series of studies (Dunning et al., 1991). Positive correlations between leader prototype trait ratings and self-ratings on Intelligence and Leadership suggested people reference the self in their definitions of Intelligence and Leadership. Results from subsequent studies showed subjects endorsed goal-oriented and people-oriented attributes as more prototypical of leadership to the extent they possessed them.

Keller (1999) found significant relationships between the "Big Five" personality dimensions and ideal leader prototype dimensions. Specifically, Conscientiousness was positively correlated to leader Dedication while Agreeableness was positively correlated to leader Sensitivity and negatively correlated to leader Tyranny. McElwee et al. (2001, Study 3) found positive relationships between subjects' self-ratings on leadership and their trait definitions of leadership. These studies illustrated people have different ideas

of what makes a good leader (Schyns & Schilling, 2010), and these ideals largely correspond with self-concepts.

These prior studies show the self-concept shapes the ideal leader prototype; one's definition of what makes an effective leader is based in part on one's view of his/her self. Consequently, leaders are judged against self-affirming ideal leader prototypes (Robson, 2007; Keller, 1999; McElwee et al., 2001, Study 3). Thus, the ideal leader prototype impacts leader judgments by influencing the standards people hold for individuals acting in a leader role.

Self-Affirming Leader Judgment

"Judgments carry a number of implicit messages about the person making the judgment…[people] are wary about what those judgments say about their own character and ability" (Dunning, 2003, p. 46-47). The self is projected in leader judgment in ways to preserve positive self-concepts. The most common strategies perceivers enact to preserve self-esteem, are describing favored leaders as similar to themselves (McElwee et al., 2001, Study 2), rating leaders perceived as similar more favorably, (Bray et al., 2012; McElwee et al, 2001, Study 3), and altering performance differences to maximize/minimize their standing as superior/inferior (Bray et al., 2012; Tesser, 2000).

Perceivers evaluate others favorably to the extent those others match their self-affirming definitions. In this respect, they consider people who possess similar skills to be better leaders than people who possess dissimilar skills (Dunning, 2003). McElwee et al. (2001, Studies 1 and 2) and Dunning et al. (1991, Study 6) showed participants rated leader targets differentially as a function of their own characteristics. In one study, they found people-oriented participants rated famous leaders as more people oriented while

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goal-oriented participants rated them as more goal oriented. In another study, they found goal-oriented individuals rated goal-oriented leaders higher on leadership ability than people-oriented leaders. Conversely, people-oriented individuals rated people-oriented leaders higher on leadership ability than goal-oriented leaders. Engle and Lord (1997) found subordinates who perceived greater attitudinal similarity with their leaders higher on liking of the leader and leader-member exchange. These results support the self-esteem maintenance literature since similarity to a leader and/or effective leader would be self-enhancing as opposed to similarity to a non-leader and/or ineffective leader (Beauregard & Dunning, 2001; Dunning et al., 1991; Meindl et al., 1985).

Perceivers may alter performance criteria by minimizing differences when their performance is inferior to others or by maximizing differences when their performance is superior to others. Beauregard and Dunning (2001) showed people altered performance differences showing bias toward the traits they themselves possessed. For example, participants who were low on a trait dimension (e.g., intelligence) applied lax standards when judging others on the dimension which allowed them to claim to have at least some of that trait or ability themselves; while, high-performing participants applied strict criteria in their judgments of others which allowed them to claim their standing as superior by rating people more negatively.

Some researchers have extended this line of research to account for the roles of both the self-affirming ideal leader prototype and self-concept in leader perception. The goal of this research was to examine more carefully the interrelations of the self, trait definitions, and social judgment (Bray et al., 2012; McElwee et al., 2001, Study 3; Robson, 2007).

While prior research provides evidence for the interrelationships between self-concepts, ideal leader prototypes, and effectiveness judgments, the relationships among the three variables is complex and varied. Clearly people's self-concepts and views of social categories such as leadership are intertwined, with the potential to influence their judgments. Research needs to move beyond what is captured by cross-sectional bivariate analysis of the impact of the ideal leader prototype and self-concept in isolation of one another.

Given the interrelationship between the ideal leader prototype and self-concept, mutual influence is one point of contention. Prior studies revealed the self explained significant variance in leader perception when the model did not include the prototype (Keller, 1999; McElwee et al., 2001, Studies 2 & 3); however, when the model accounted for the prototype, the self no longer predicted leader perception while the prototype explained significant variance in leader perception independent of the self (Bray et al., 2012; McElwee et al., 2001, Study 3).

Foti et al. (2012) conducted latent transition analyses in order to examine the associations between the ideal leader prototype and self-concept from both directions. Results showed self-perceptions provided comparatively more information about ideal leader prototypes for more prototypical patterns than the reverse.

Collectively, these three studies substantiate a full mediation framework, wherein the self influences the leader prototype, which in turn influences leader judgment (Bray et al., 2012; McElwee et al., 2001, Study 3; Robson, 2007). In the full mediation framework, the self-concept is distal to leader judgment, one's image of themselves no longer has bearing on the judgment; in this case, the ideal leader prototype fully explains

the linkage. In other words, there is no need or desire to judge leaders based on similarity to self-concepts, if the more contextual leadership standard (i.e., ideal leader prototype) encapsulates traits similar to the self. Theorists assert the ideal leader prototype is the more proximal predictor of leader effectiveness judgments, while the self-concept represents the more stable, dispositional variable of the two. The previous research leading to these assertions have operationalized all three variables on the same dimensions. A more stringent analysis of the roles of the ideal leader prototype and self-concept, independently and accounting for the effects of the other, is needed to dispel the partial mediation model wherein both predictors explain unique variance in leader judgment. Finally, the previous research has not differentiated between judgments regarding how effective one perceives a leader to be and whether or not one is perceived to be a leader.

The Pattern Approach: Self-Affirming Leader Perception

The literature reviewed to this point showed judgments of the same leader can be influenced by perceivers' unique standing on traits within self-concepts and the self-affirming ideal leader prototypes they possess (Dunning, 2003; Dunning & Cohen, 1992; Dunning & Hayes, 1996; McElwee et al., 2001). Alternative to this dominant variable-oriented view, the pattern approach maintains humans and human behavior are not simply the sum of a set of variables, rather a Gestalt personifying complex yet lawful interactions between involved variables (Foti et al., 2012; Foti et al., 2011; Magnusson & Bergman, 1990). This approach is advantageous because it affords representation of the self-concept, the ideal leader prototype, and leader perception as whole entities and processes with meaningful variations of traits both within and between individuals.

Rather than providing a fragmented understanding of what individual difference variables are associated with leader effectiveness ratings, the study seeks to identify different subgroups of individuals and their judgment strategies based on the unique interactions of traits that characterize their ideal leader prototypes and self-concepts.

The importance of the pattern-oriented approach was demonstrated in research conducted by Critcher and Dunning (2009), examining how patterns of trait covariation in the self were related to people's implicit personality theories. Although they were interested in the relationship between the self and implicit personality theories, their results are very applicable to implicit leadership theories. They found people do not merely use information about their own standing on individual traits to make inferences about others on specific variables (the variable approach), but also use the multidimensional pattern across traits within the self to guide their inferences (the pattern approach). Specifically, they found people's beliefs about how traits co-vary within their implicit personality theories arise, in part, from the way they perceive two traits to co-vary within themselves. If people see themselves as high on one trait and low on a second trait, they are more likely to assume the traits negatively co-occur in others as well; if the second trait is also high, they likely assume the traits positively co-occur in others.

The pattern-oriented approach is well positioned to address these phenomena with a person-centric focus. Tenets of the pattern-oriented approach can be summarized as (1) individual specificity, (2) complex interactions, (3) inter-individual differences in intra-individual variability/stability, (4) pattern summary, (5) holism, and (6) pattern parsimony (Magnusson & Bergman, 1990; Sterba & Bauer, 2010). Individual specificity

refers to the notion that information processing and behavior is partly unique to individuals. Complex interactions infer process is complex with various factors interacting at various levels. Inter-individual or -group differences in intra-individual or -group variability/stability infer there is lawfulness to the stability and variability that occurs in process and behavior within and between people or groups. Pattern summary reflects the notion that processes develop in a lawful way that can be characterized as patterns of the involved factors.

Holism infers the meaning of those involved factors may be different depending on how they interact. Pattern parsimony concludes there is a parsimonious set of patterns that can globally characterize the infinite number of patterns that may exist at a more detailed level (Magnusson & Bergman, 1990; Sterba & Bauer, 2010). Given prior research has shown meaningful patterns do exist for the self-concept and ideal leader prototype (Asendorpf, Borkenau, Ostendorf, &Van Aken, 2001; Asendorpf & Van Aken, 1999; Bray et al., 2012; Caspi, 1998; De Fruyt, Mervielde, & Leeuwen, 2002; Foti et al., 2012), the present study employed cluster analysis and multilevel modeling in a policy-capturing to explore variance within and between followers across perception of multiple leaders from a pattern-oriented approach (Magnusson & Bergman, 1990). The combination of methodological and statistical strategies permitted testing the pattern-oriented principles of: complex interactions, pattern parsimony, holism, and inter-group differences in intra-group stability.

Ideal Leader Prototype Patterns

Prior research has examined ideal leader prototypes and personality from a pattern-oriented approach. Foti and colleagues conducted latent model-based

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classification analyses and determined four patterns best characterize ideal leader

prototypes (Bray et al., 2012; Foti et al., 2012). These included the Prototypic, Anti-

Prototypic, Autocratic, and Laissez-Faire leaders each displaying a unique pattern

comprised of four factors from Epitropaki and Martin's (2004) leader prototype scale:

Sensitivity, Intelligence, Dedication, and Tyranny.

The Prototypic leader displayed high levels of Sensitivity, Intelligence, and

Dedication and low levels of Tyranny. This ideal prototype leader most closely

resembles conceptualizations of transformational leaders (Avolio & Bass, 1995). The

Prototypic leader is traditionally considered the most efficacious or prototypical leader

prototype. In contrast, the Anti-Prototypic leader displayed low levels of Sensitivity,

Intelligence, and Dedication and high Tyranny; this leader can be considered the

antithesis of a transformational leader. The Autocratic leader displayed low Sensitivity,

high Tyranny and average levels of Intelligence and Dedication; this leader shares

elements of authoritarian leadership (Bass, 1990; Yukl, 1999). The Laissez-Faire leader

displayed average to low levels across all four factors; this pattern can be characterized as

a lack of leadership or lack of a distinctive leader style given the leader displays no strong

standing on any of the leader traits (Bass, 1985).

Self-Concept Patterns

Several researchers have identified three patterns as the best representation of

self-report personality across different samples, age groups, measures and across time

intervals extending three years (Asendorpf et al., 2001; Asendorpf & Van Aken, 1999;

Caspi, 1998; De Fruyt et al., 2002). These include the Resilient, Over-Controlled, and

Under-Controlled personalities comprised of distinctive patterns of the Big Five traits:

Emotional Stability/Neuroticism, Extraversion, Intellect/Imagination, Conscientiousness, and Agreeableness (Goldberg, 1992).

The Resilient personality displayed low levels of Neuroticism/high Emotional Stability and above average levels across the four efficacious traits; this pattern is associated with acceptable behaviors and a well-adjusted personality. The Resilient personality is traditionally considered the most efficacious or prototypical personality. The Over-Controlled personality displayed high Neuroticism/low Emotional Stability), low Extraversion, and average levels of the remaining efficacious traits; this personality is described as having more internalizing tendencies for maladjustment. The Under-Controlled personality displayed high Extraversion and Neuroticism/low Emotional Stability and average levels of the remaining efficacious traits; this personality is described as having more externalizing tendencies for maladjustment (Asendorpf et al., 2001; Asendorpf & Van Aken, 1999; Caspi, 1998; Rammstedt, Reimann, Angleitner, & Borkenau, 2004). Externalized maladjustment relates to poor overt behaviors such as aggression and disruption. Internalized maladjustment, on the other hand, relates to poor personal or emotional functioning; examples include depression and social withdrawal behaviors (Cole, Terry, Lenox, Lochman, & Hyman, 1995; Rubin, Chen, McDougall, Bowker, & McKinnon, 1995).

Patterns of Self-Affirming Leader Judgment

A question that follows from this pattern-oriented research is whether perceivers' self-concepts and their ideal leader prototypes influence their perception of many different leaders in a systematic pattern. If self-concepts are easily accessible and frequently activated (Dunning & Hayes, 1996; Srull & Wyer, 1979) and traits within the

self-concept as well as the ideal leader prototype are stable (Keller, 1999), individuals should elicit stable self-affirming patterns or policies in leader perception. Following from this logic, it is reasonable to consider people maintain the desire to preserve positive self-concepts over multiple judgments.

By examining repeated measures data within individuals, one can determine whether there is a self-affirming implicit policy enacted over the judgment of multiple managerial performance scenarios. Studies that examine a single judgment answer the question: What are individuals' perceptions of a given leader who displays behaviors similar/dissimilar to their self-concept and/or ideal leader prototype? Examining multiple leader judgments as a pattern affords answering the question: How do people utilize information about performance behaviors to form perceptions of leaders depending on their self-concept and/or ideal leader prototype?

With the exception of Bray et al. (2012), no study has examined multiple leader judgments as a pattern predicted by the ideal leader prototype and self-concept. In the study, participants provided ideal leader prototype ratings and self-ratings on the same four leader traits (i.e., Intelligence, Sensitivity, Dedication, and Tyranny). Bray and colleagues then presented subjects with four different scenarios. These scenarios depicted managers with performance behaviors that reflected the same four traits at varied levels of effectiveness (i.e., Analytical Abilities, Interpersonal Skills, Productivity, and Attitude). Participants provided a rating of overall leader effectiveness for each manager.

Log-linear modeling revealed individuals ascribed to one of two rating strategies; some people rated overall effectiveness differently across the four managers while others

did not distinguish between the four managers in terms of overall effectiveness. In other words, some evoked more stringent strategies in terms of discriminating differences in managerial performance behaviors to form overall judgments about leaders compared to others. Further, analyses showed individuals' rating strategies were attributed to their ideal leader prototype independent of their self-perceptions of leadership; the former rating strategy described those with prototypical ideal leader prototypes (i.e., high Intelligence, high Sensitivity, high Dedication, and low Tyranny) while the latter rating strategy described those with less prototypical ideal leader prototypes (e.g., low Intelligence, low Sensitivity, low Dedication, and high Tyranny). This finding illustrated how individuals may maximize performance differences in order to represent themselves as superior or minimize performance differences in order to represent themselves as comparable to others (Beauregard & Dunning, 2001).

While Bray and colleagues explained the roles of the ideal leader prototype and self-concept in leader judgment more thoroughly than previous studies, two weaknesses in their study call the robustness of the findings into question. First, it is likely the cross-sectional design inflated the relationship between the ideal leader prototype, self-concept, and leader judgment. Second, it is likely the operationalization of all variables on the same four constructs inflated the relationships. It is plausible the operationalization of leader performance behaviors on the dimensions found to be representative of the ideal leader prototype (i.e., Intelligence, Sensitivity, Dedication, and Tyranny) biased the variance accounted for in leader judgment by the ideal leader prototype over the self-concept.

The present study built on Bray et al. (2012) while addressing these weaknesses.

The current study employed three different yet related operationalizations of the key constructs of: ideal leader prototype, self-concept, and managerial behaviors. This permitted examining the interrelationship between the three variables without inflation attributed to operationalization of all variables on the same four constructs. Following from previous studies, ideal leader prototypes were assessed on Intelligence, Sensitivity, Dedication, and Tyranny (Epitropaki & Martin, 2004) while self-concepts were assessed using the personality dimensions of Emotional Stability, Extraversion, Conscientiousness, and Agreeableness (Goldberg, 1992). Prior variable- and pattern-oriented research has shown these dimensions of the ideal leader prototypes and the self-concept are related (Keller, 1999; Foti et al., 2012; Bray et al., 2012).

The study's design also permitted examining interrelationships between the ideal leader prototype, self-concept, and leader judgment without bias toward the ideal leader prototype attributed to operationalization of managerial performance behaviors on constructs found to be representative of the ideal leader prototype. In order to use managerial performance dimensions equally representative of the aforementioned traits in the ideal leader prototype and self-concept, I turned to two overarching taxonomies for manager and leader performance effectiveness with demonstrated relationships to leader prototype and personality traits. In the leader performance literature, Initiating Structure and Consideration represent two broad facets for leader behaviors, which have been empirically linked to leader prototype ratings (Fraser & Lord, 1987; Nye & Forsyth, 1991; Schriesheim & Stogdill, 1975; Stogill, 1963). In the job and managerial performance literature, Task and Contextual performance represent two broad facets for performance behaviors which, have been empirically linked to self-concept dimensions

(Barrick, Mount & Judge, 2001; Borman, & Brush, 1993; Borman, & Motowidlo, 1997; Hurtz & Donovan, 2000; Johnson, 2001; Motowidlo & Van Scotter, 1994).

Initiating Structure and Task performance are comparable. Both concern accomplishments of duties and responsibilities in a given job or role that contribute to the organization's technical core. Specific to managers, Task performance and Initiating Structure may include planning, defining roles, providing information, organizing people and resources, and monitoring progress among other goal attainment behaviors (Schriesheim & Stogdill, 1975; Stogill, 1963). Previous meta-analytic studies found self-reported Conscientiousness and Emotional Stability correlate positively with Task performance (Barrick, Mount & Judge, 2001; Hurtz & Donovan, 2000). Empirical studies found task-related leader prototype traits and behaviors (e.g., Intelligence and Dedication) are positively associated with Initiating Structure (Fraser & Lord, 1987; Gioia & Sims Jr., 1985; Nye & Forsyth, 1991; Rush & Russell, 1986).

Likewise, Consideration and Contextual performance are comparable. Contextual performance and Consideration concerns extra-role behaviors that enhance or detract from the organization's social and psychological environment (Borman & Motowidlo, 1993; Campbell, 1990; Conway, 1999; Rotundo & Sackett, 2002; Stodgill, 1963). Specific to managers, Contextual performance and Consideration may include building and mending relationships, helping, solving interpersonal problems, and motivating subordinates among other human relations behaviors (Borman & Motowidlo, 1993; Conway, 1999; Rotundo & Sackett, 2002; Stodgill, 1963). Previous meta-analytic studies found positive correlations between Contextual performance Extraversion, Agreeableness, Conscientiousness and Emotional Stability (Barrick, Mount & Judge,

2001; Hurtz & Donovan, 2000). Empirical studies found person-oriented leader

prototype traits and behaviors (e.g., Sensitivity and Tyranny) are associated with

Consideration (Fraser & Lord, 1987; Gioia & Sims Jr., 1985; Nye & Forsyth, 1991; Rush

& Russell, 1986).

These dualistic taxonomies encompass broad performance dimensions. A more

specific taxonomy for managerial performance effectiveness was selected in order to vary

behaviors across managerial profiles in a systematic fashion. Koontz, O'Donnell, &

Weihrich's (1958) management taxonomy includes Planning, Organizing, Motivating,

and Controlling performance dimensions (Kinicki & Williams, 2011; Koontz &

Weihrich, 2006). Planning relates to setting objectives and defining processes to achieve

them. Organizing relates to directing tasks, people, and other resources to carry out the

work. Motivating involves influencing, arousing, and addressing the needs of people to

foster contribution toward goals. Controlling involves monitoring, measuring, and

implementing corrective action to processes or outcomes to ensure adherence to rules and

standards (Kinicki & Williams, 2011; Koontz, O'Donnell, & Weihrich, 1958; Koontz &

Weihrich, 2006).

Given, Initiating structure and Task performance subsume the

Planning/Organizing and Controlling dimensions while Consideration and Contextual

performance subsume the Motivating dimension, there is compelling reason to believe

these performance dimensions exhibit relationships with dimensions of both the ideal

leader prototype and self-concept. Thus, one would expect people with different ideal

leader prototypes and self-concepts to utilize these managerial performance dimensions

differently in their overall judgments of leader categorization and effectiveness.

III. PURPOSE AND HYPOTHESES

The purpose of the current study was to extend limited empirical work surrounding how the self-concept and ideal leader prototypes influence leader categorization and effectiveness judgments. Several studies have demonstrated the self-concept predicts the ideal leader prototype (Foti et al., 2012; Bray et al., 2012; Dunning et al., 1991, Studies 3 & 4; Keller, 1999; McElwee et al., 2001, Study 3; Robson, 2007) while only three have examined their impact on leader effectiveness judgments (Bray et al., 2012; McElwee et al., 2001, Study 3; Robson, 2007). These three studies supported a model wherein the influence of the self-concept on leader judgment is fully mediated by the ideal leader prototype (Bray et al., 2012; McElwee et al., 2001, Study 3; Robson, 2007). Based on the mediating framework substantiated by Bray et al. (2012) and Robson (2007), the current study took a novel approach in testing hypotheses concerning how the self-concept predicts the ideal leader prototype and leader judgment as well as the how the ideal leader predicts leader judgment.

Using a pattern-oriented approach, I examined how people weight different performance dimensions to form leader categorization and effectiveness judgments, and further, whether weighting of performance dimensions was predicted by the pattern of traits comprising the self-concept and ideal leader prototype. Examining judgments as patterns or policies provides a holistic picture of the implicit strategies perceivers evoke to maintain self-esteem. This shifted the focus from content to the function of prototypes. Further, studying the phenomenon from a pattern-oriented perspective provided added insight by depicting the role of the self-concepts and ideal leader prototypes in the leader perception process in a more holistic, interactionistic fashion.

In addition, the current study overcame previous methodological limitations. Prior research often examined interrelationships between the self-concept and the ideal leader prototype and inferred what the results entailed for actual leader perception; that is, they assumed how a leader would be perceived based on what was discovered about the ideal leader prototype without actually measuring leader judgments. When prior studies measured all three variables, the self-concept and ideal leader prototype were typically rated on the same scale with different referents (Bray et al., 2012; McElwee et al., 2001; Robson, 2007). Additionally, most studies employed a cross-sectional design. It is likely the observed relationship between the ideal leader prototype, self-concept, and leader judgments are inflated by these study artifacts.

The present study's methodological improvements allotted a more accurate assessment of the mediating relationship between the self-concept, the ideal leader prototype, and leader judgment. Although the present study necessitates the use of self-report surveys to assess self-referential perceptions and ideals (Brannick, Chan, Conway, Lance, & Spector, 2010), all variables were measured on different constructs with a time lag between the independent and dependent variables. Therefore, the design reduced shared variance due to measuring all variables on the same constructs at the same time.

The role of the self-concept and ideal leader prototype in leader categorization and effectiveness judgments were examined using four leader prototype dimensions: Sensitivity, Intelligence, Dedication, and Tyranny (Epitropaki & Martin, 2004), four corresponding personality dimensions reflecting the self-concept: Agreeableness, Conscientiousness, Emotional Stability, and Extraversion (Goldberg, 1992), and three managerial performance dimensions: Planning, Motivating, and Controlling (Koontz et

al., 1958). In the context of the study, the implicit policy essentially represented a pattern for how various managerial performance behaviors were given weight in the judgment process for determining who is a leader versus a non-leader and how effective they are. Thus, one could examine how patterns of traits within the self-concept and the ideal leader prototype impacted the weights attached to managerial behaviors in the implicit policies that guide leader categorization and effectiveness judgment.

The self-concept is evoked in leader definition; individuals define leadership in a manner that allows them to self-affirm. Research summarized by Dunning (2003) shows that people tend to project their own behaviors and attributes onto their definitions of social categories like leadership. By describing their ideal leader prototype as similar to themselves, they associate themselves with the leader category. Based on previous research, individuals with more efficacious self-concepts (i.e., the Resilient pattern) are more likely to endorse ideal leader prototypes with similar standing on efficacious traits (i.e., the Prototypic pattern). In contrast, individuals with less efficacious self-concepts (i.e., the Under-Controlled and Over-Controlled patterns) are more likely to endorse ideal leader prototypes with lower standing on corresponding efficacious traits (i.e., the Anti-Prototypic, Autocratic, and Laissez-Faire patterns). Therefore, the following hypothesis was made:

H1: The self-concept will predict the ideal leader prototype.

Based on the Leadership Categorization Theory, when a follower or perceiver encounters a manager they evoke their leader prototype. If the manager exhibits behaviors similar to those idealized in the ideal leader prototype, the manager is categorized as a leader and judged as effective; if not, the manager is categorized as a

non-leader and judged as ineffective. Following from previous research, people with a

higher standard of leadership (i.e., the Prototypic ideal leader) are likely to categorize

fewer managers as leaders and rate managers as less effective compared to individuals

with lower standards of leadership (i.e., the Anti-Prototypic, Autocratic, and Laissez-

Faire ideal leaders). Therefore, the following hypothesis was made:

> *H2: The ideal leader prototype will predict leader categorization and*
>
> *effectiveness judgments, such that the subgroup describing their ideal leader*
>
> *prototype as Prototypic will categorize fewer managers as leaders and rate them*
>
> *less effective.*

Implicit policies are enacted in assessing the behavior of multiple potential

leaders; that is, people weight behaviors systematically in determining who to categorize

as a leader and to judge effectiveness. Again, given the previous research summarized by

Dunning (2003), I expect people to utilize behaviors that reflect traits possessed by their

ideal leaders to the extent their ideal leaders possess those traits; therefore, people with a

higher standard of leadership (i.e., the Prototypic ideal leader) should weight the Planning,

Motivating, and Controlling behaviors more in their judgment process given their ideal

leaders have higher standing on efficacious traits (i.e., Intelligence, Sensitivity, and

Dedication) and lower standing on the inefficacious trait (i.e., Tyranny). Therefore, the

following hypothesis was made:

> *H3: The ideal leader prototype will predict implicit policies for leader*
>
> *categorization and effectiveness judgment, such that the subgroup describing*
>
> *their ideal leader prototype as Prototypic will weight Planning, Motivating, and*
>
> *Controlling behaviors more.*

The self-concept is also evoked in leader judgment. In assessing behaviors, followers can claim they have what it takes to be a leader, if they categorize persons exhibiting traits similar to their own as effective leaders and persons exhibiting traits dissimilar to their own as ineffective non-leaders. Based on previous research, people with more efficacious self-concepts (i.e., the Resilient pattern) are likely to categorize fewer managers as leaders and rate managers as less effective compared to individuals with lower standings on efficacious traits Agreeableness, Conscientiousness, Emotional Stability, and Extraversion (i.e., the Under-Controlled and Over-Controlled patterns) (Beauregard & Dunning, 2001; Dunning et al., 1991; Judge & Long, 2012). Therefore, the following hypothesis was made:

> *H4: The self-concept will predict leader categorization and effectiveness*
>
> *judgments, such that the subgroup describing their self-concept as Resilient will*
>
> *categorize fewer managers as leaders and rate them less effective.*

The implicit policies for leader categorization and effectiveness can be explained in part by the self-concept. To maintain self-esteem, perceivers weight behaviors that reflect traits they possess more heavily than behaviors that reflect traits they do not possess. One would expect people with a more efficacious self-concept (i.e., the Resilient pattern) to weight the Planning, Motivating, and Controlling behaviors more in their judgment process given their self-concepts have higher standings on all efficacious traits (i.e., Agreeableness, Conscientiousness, Emotional Stability, and Extraversion) (Colbert, Judge, Choi, & Wang, 2012). Therefore, the following hypothesis was made:

> *H5: The self-concept will predict implicit policies for leader categorization and*
>
> *effectiveness judgment, such that the subgroup describing their self-concept as*

Resilient will weight Planning, Motivating, and Controlling behaviors more.

Some previous researchers have accounted for the simultaneous effects of the ideal leader prototype and self-concept on leader effectiveness judgments (Bray et al., 2012; McElwee et al., 2001, Study 3). Their findings supported a fully mediated relationship wherein the ideal leader prototype is the more proximal predictor accounting for all unique variance in leader judgment beyond the self-concept. They assert a person is more likely to use their ideal leader prototype than their self-concept when a leader is encountered. This suggests there is less cause for a person to evoke their self-concept as a referent in leader judgment, if they have already defined their ideal leader prototype in the image of themselves. However, these studies employ a cross-sectional assessment of both predictors using the same operationalizations. Therefore, the study tests the assertions with more stringent methodology:

> *H6: The ideal leader prototype will predict leader categorization and effectiveness judgments over the self-concept.*
>
> *H7: The ideal leader prototype will predict implicit policies for leader categorization and effectiveness judgment over the self-concept.*

IV. METHOD

Focal Study Participants

The sample for the focal study included undergraduate business students enrolled in the junior-level Management Theory and Leadership Practices business course, excluding those who participated in the pilot study. A total of 417 students participated in the study with a 20.38% attrition rate from the first phase to the second phase. 332 participated in Part 2; however, only 318 were retained in final the sample. Of the 318,

45% were female and 55% were male. The mean age was 20.81 with a standard deviation of 1.83. Of the final sample, 81.1% identified themselves as Caucasian, 8.2% as Asian, 3.8% as African American, .06% as Hispanic, .06% as Native American or Pacific Islander, and 5.7% as 'Other'.

Students reported varied amounts of leadership experience: 22.3% indicated having a great deal of experience; 56% indicated having a moderate amount; 18.9% indicated having little experience; 2.8% indicating having none. Participants reported varied types of leadership experience with the majority specified in work, extracurricular activities, sports, and class projects.

Policy-Capturing Scenarios

The application of multilevel modeling and policy-capturing methodology provided the opportunity to examine variance within and between individuals or groups across multiple judgments. Policy-capturing studies present participants with several scenarios; the sub-dimensions of performance are manipulated to reflect different levels of effectiveness. Participants provide an overall rating of effectiveness for each scenario. Ratings are then subjected to regression analyses; these are said to "capture the policy" of raters by calculating how predictable overall ratings are, given scores on the separate sub-dimensions of performance; in addition the relative importance of each dimension in determining the overall rating can be computed (Hobson & Gibson, 1983, p. 640). Therefore, the regression equation is the implicit policy. The unique regression equations represent the unique implicit rating policy of individual raters while the mean regression equation directly computed by hierarchical linear modeling (HLM) represents the average implicit rating policy of the sample. The implicit policy essentially represents a pattern

for how various dimensions are given weight in the judgment process.

The present study employed policy-capturing as a vehicle for identifying patterns of leader judgments across multiple leader profiles. This policy statistically describes how Planning, Motivating, and Controlling performance behaviors are weighted in order to form overall judgments concerning leader categorization and leader effectiveness. HLM affords testing for between-group differences in the weights attached to Planning, Motivating, and Controlling behavior. Thus, an implicit policy is derived for the different sub-groups of ideal leader and self-concept patterns.

Following from pilot study results, twenty-four scenarios were constructed in which manager behaviors along the three performance dimensions were completely crossed (2X2X2) in a factorial design wherein Planning, Motivating, and Controlling were manipulated to be effective (+1) or ineffective (-1). This orthogonal dimension structure was considered most appropriate given the three dimensions reflect a taxonomy and the correlation between them is unknown. In addition, the orthogonal structure contributed to the study's aims to model and isolate variables' impact on judgment policies while exercising experimental control (Cooksey, 1996; Sinclair, 2003). Three concrete behaviors (one for each performance dimension) were presented in a brief paragraph-form scenario describing a hypothetical manager. See Appendix A for the complete set of managerial performance scenarios.

The 8:1 scenario-to-dimension ratio maintained in the current study surpassed Cooksey's (1996) recommended 5:1 minimum but fell short of Nunally's (1978) recommended 10:1 minimum. This tradeoff struck a balance between providing a sufficient number of scenarios in order to validly assess judgment policies and limiting

the number of scenarios in efforts to curtail respondent fatigue and boredom (Aiman-Smith, Scullen, & Barr, 2002).

Pilot Study to Develop Policy-Capturing Scenarios

  Pilot Study Participants. The pilot sample consisted of 166 undergraduate business students enrolled in a junior-level business course (Management Theory and Leadership Practices) at Virginia Tech. This survey course introduces a broad range of concepts, theories, and practices important for a basic understanding of management. The student sample was familiar with the selected management taxonomy from their course textbook and lecture (Kinicki & Williams, 2011).

  Regarding gender, the pilot sample was 43% male, 57% female with two unknown. Regarding race, the sample was 85% Caucasian, 1% African American, 3% Hispanic, 13% Asian, and 1% Native American with two unknown. Regarding class standing, the sample was 35% senior, 76% junior, and 1% sophomore with four unknown.

  Pilot Study Procedure. A pilot study was conducted to develop the managerial performance scenarios; four major steps were involved: (1) identification of managerial performance dimensions, (2) compilation of a separate list of managerial behaviors for each performance dimension, (3) scaling of the behaviors to ensure that they were manipulated with equivalent strength, and (4) creation of the scenarios (Rotundo & Sackett, 2002; Sinclair, 2003).

  Step 1. The four dimensions Planning, Organizing, Motivating, and Controlling from Koontz, O'Donnell, & Weihrich's (1958) management taxonomy were selected (Kinicki & Williams, 2011; Koontz & Weihrich, 2006) selected to provide examples of

actual behaviors managers perform while affording a fair test of hypotheses concerning the ideal leader prototype and self-concept. Previous studies have found relationships between leader prototypically and Initiating Structure and Consideration behavioral ratings (Fraser & Lord, 1987) as well relationships between self-report Big Five factors and task and contextual performance behaviors (Barrick, Mount & Judge, 2001; Hurtz & Donovan, 2000; Van Scotter & Motowidlo, 1996). Additionally, the taxonomy's dimensions were broad and inclusive of the various facets of management representative in the literature.

Step 2. A total of 251 specific behaviors were taken from the managerial job analysis and behavior literature: Baehr's (1987) Managerial and Professional Job Functions Inventory; Hemphill's (1967) Executive Position Description Questionnaire; Lau, Newman, and Broedling's (1980) Executive Job Content; Page's (1988) Management Position Description Questionnaire; Roach's (1956) Supervisory Behavior Questionnaire. 283 ineffective performance behaviors were generated to represent ineffective levels of the effective performance behaviors.

Step 3. Two exercises were conducted to determine whether the manipulated dimension levels generated the desired perceptions of ineffectiveness and effectiveness for each management performance dimension. Students were awarded two extra credit points in exchange for completing pilot exercises online.

Participants were presented with a random subset of 150 managerial performance behaviors and asked to rate each behavior on a 7-point Likert scale for effectiveness where 1 = 'Very Effective' and 7 = 'Very Ineffective'. Participants had the option of

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selecting 8 = 'Don't Know/Don't Understand'; these individual responses were omitted from analysis. The average completion rate for this exercise was 89.33%.

Participants were then presented with the definitions of Planning, Organizing, Motivating, and Controlling along with a second random subset of 150 managerial performance behaviors and asked to assign each behavior to one of the four categories. Participants were asked to indicate whether or not they experienced any difficulty in categorizing behaviors as a result of not understanding the definitions of categories. Participants who indicated difficulty were excluded from analysis. The average completion rate for this exercise was 67.03%.

Step 4. One behavior for each of the three performance dimensions was randomly selected from the behaviors meeting all criteria. This process produced eight unique scenarios, and was repeated twice to obtain an additional 16 scenarios for a total of 24 unique scenarios. All effective behaviors appeared only once in scenarios. Although ineffective behaviors appeared two to three times in the scenarios, no combination of two behaviors was duplicated across scenarios (with the exception of four repeat scenarios that were included to assess reliability).

Measures

Ideal Leader Prototype Scale (See Appendix B). The 21-item scale assessed participants' ideal business leader prototype (Epitropaki & Martin, 2004). Participants were asked to rate how descriptive the listed traits were of their ideal business leader on a 7-point Likert-scale with one being 'not at all descriptive' and seven being 'extremely descriptive'. Cronbach's alpha indicated sound internal reliability for the overall scale (α = .84) in addition to subscales: Sensitivity α = .73; Intelligence α = .77; Dedication α =

.82; Tyranny α = .83. A confirmatory factor analysis indicated the data fit to the four-factor structure without modification: χ^2 (98) =204.32, p <.01; CFI =.95; TLI= .94; RMSEA= .06.

International Personality Item Pool (See Appendix C). This 50-item scale was developed by Goldberg (1992) to measure personality in accordance with the Big-Five framework. This measure was employed to tap into participants' self-concepts. Participants were asked to rate how descriptive the listed traits were of their own personality on a 5-point Likert scale with one being 'very inaccurate' and five being 'very accurate'. Cronbach's alpha indicated sound internal reliability for the overall scale (α = .98) in addition to all scales: Conscientiousness α = .87; Extraversion α = .96; Agreeableness α = .96; Emotional Stability α = .91; and Intellect/Imagination α = .91.

A confirmatory factor analysis indicated the data did not fit the five-factor structure: χ^2 (1165) = 3164.15, p <.01; CFI =.85; TLI=.84 ; RMSEA=.09. Items for Intellect/Imagination cross-loaded and explained only 32% of variance for the Intellect/Imagination factor. The data fit the four-factor structure better after removing the Intellect/Imagination factor: χ^2 (734) = 2015.75, p <.01; CFI =.92; TLI=.91 ; RMSEA=.07.

Leader Categorization Scale. This 1-item scale asked participants to rate whether they considered the manager to be a leader based on the performance scenario. Participants selected from two options: 'leader' or 'non-leader'.

Leader Effectiveness Scale (See Appendix D). This 4-item scale assessed perceptions of overall leader effectiveness. It asked participants to rate their agreement with four statements regarding the effectiveness of the manager on a 7-point Likert scale

with one being 'strongly disagree' and seven being 'strongly disagree'. The scale is a shortened version of Hais, Hogg, and Duck's (1997) 10-item scale. The four items were aggregated to produce an average effectiveness score for each manager.

Focal Study Procedure

Participants completed the study online in exchange for extra credit. The study was comprised of two phases- both occurring online. In the first phase, participants completed the International Personality Item Pool to assess the self-concept and Ideal Leader Prototype Scale to assess the ideal leader prototype. The self-concept, ideal leader prototype, and leadership self-efficacy measures were counterbalanced.

In the second phase, participants were presented with a total of 28 managerial performance scenarios along with the Leader Categorization and Leader Effectiveness scales. Participants reviewed each scenario one-at-a-time and completed the Leader Categorization Scale followed by the Leader Effectiveness Scale based on the hypothetical manager presented in each individual scenario before proceeding to the next. They reviewed and completed the Leader Categorization and Leader Effectiveness scales for a total of 24 unique scenarios in addition to four repeat scenarios included to assess judgment consistency within participants (i.e., intra-rater reliability). The time for survey completion was recorded by the online survey system. The average duration was 32 minutes. Fourteen participants were dropped for having survey durations less than five minutes; this brought the focal study sample from 332 to 318. The .79 correlation between the four repeat scenarios with their duplicates suggested participants were consistent in their responses to identical scenarios.

The scenarios were presented in a randomized order within the first half and second half of the scenarios to prevent order effects and permit testing for fatigue effects. A minor decrease of .06 in the variance explained in leader effectiveness for the first twelve scenarios compared to the variance explained in leader effectiveness last twelve scenarios suggested responses were not impaired by fatigue (Judge & Bretz, 1992). Additionally, the presentation order of performance dimensions within the scenarios were varied across participants such that participants read scenarios containing dimensions presented in the order (a) Planning-Motivating-Controlling, (b) Motivating-Controlling-Planning, or (c) Controlling-Planning-Motivating. This strategy was employed to limit and test for order efforts.

V. PILOT STUDY RESULTS

In order for managerial performance behaviors to be selected for inclusion in the final scenarios, they had to satisfy two criteria. First, only behaviors with inter-rater agreement, $r_{wg(1)}$, greater than or equal to .70 were selected. Of the original 534 behaviors, 196 met this criterion (M = .78, SD = .06). Second, at least 65% of the respondents had to agree on the categorization of the behavior as representing Planning, Organizing, Motivating, or Controlling. Of the remaining 196 behaviors, 89 satisfied criterion for categorization: 25 for Planning, 14 for Organizing, 24 for Motivating, and 26 for Controlling.

Given the similarity between Planning and Organizing, the dimension and associated behaviors for Organizing were dropped from the taxonomy. Planning was retained over Organizing because a larger number of behaviors met $r_{wg(1)}$ and

categorization criteria. After dropping Organizing, 75 behaviors remained (M = 70.00%, SD = .05).

Next, the mean, standard deviation, and range of ratings for effective behaviors and ineffective ratings were examined for each managerial performance dimension to ensure unbiased comparisons (See Table 1 for Descriptive Statistics for Managerial Performance Dimensions with All Behaviors Included). In order to obtain a similar distribution in effectiveness ratings across dimensions, seven effective and two ineffective Planning behaviors were dropped, six effective and two ineffective Motivating behaviors were dropped, and eight effective and one ineffective Controlling behaviors were dropped (See Table 2 for Descriptive Statistics for Managerial Performance Dimensions with Reduced Set of Behaviors Included). After this step, a total of 48 behaviors were retained (See Table 3 for Agreement and Descriptive Statistics for Selected Managerial Performance Behaviors): 12 effective behaviors for each dimension and five to six ineffective behaviors for each dimension.

VI. FOCAL STUDY RESULTS

Missing Data

Data from the self-concept factors and ideal leader prototype factors as well as the leadership self-efficacy and leadership effectiveness scales were aggregated to the mean level for each participant if responses were provided for more than three items. 5.08% of data were missing after aggregation, including the 1-item leader categorization variable. This missing data was imputed using the Expectation-Maximization (EM) algorithm in PRELIS to preserve sample size (Joreskog & Sorbom, 2006).

The EM method replaces missing values with the predicted scores from a series of regression equations where each missing variable is regressed on the remaining observed variables. While this method is shown to recover more accurate parameter estimates than listwise deletion under missing-completely-at-random (MCAR) and missing-at-random (MAR) assumptions, it is important to note the estimates may be considered more model-specific (Enders, 2010).

Bivariate Analyses

Descriptive statistics and bivariate correlations among the Level-1 variables and Level-2 variables are provided in Table 4. At Level-1, all managerial performance dimensions were significantly correlated to the dependent variables of leader categorization and effectiveness, with no one dimension correlating with outcomes much higher than the others. At Level-2, the significant correlations between self-concept factors and ideal leader prototype factors corroborated previous findings demonstrating associations between the self-concept and ideal leader prototype (Foti et al., 2012; Keller, 1999). The self-concept traits Agreeableness, Conscientiousness, and Emotional Stability were positively related to the efficacious ideal leader prototype traits Intelligence, Dedication, and Sensitivity, and negatively related to Tyranny. Extraversion was positively correlated with Intelligence and Dedication.

Cluster Analysis

First, cluster analyses were performed to obtain the ideal leader prototype and self-concept patterns. Cluster analysis is a statistical analysis that partitions the sample into more homogenous sub-groups based on the input variables. In the context of the present study, cluster analysis was used to classify each person in the sample into a sub-

group based on their standing on multiple traits within the self-concept and ideal leader prototype. Each subgroup has a unique pattern of traits for their self-concept and for their ideal leader prototype. These subgroups become the unit of analysis rather than the individual mean scores for each trait variable. Two K-means cluster analyses were performed- one on the self-concept factor scores and a second on the ideal leader prototype factor scores. Model parsimony as well as class size and theoretical interpretation of the patterns were considered in choosing a solution.

For the ideal leader prototype, I conducted a K-means cluster analysis using the mean scores for the Sensitivity, Intelligence, Dedication, and Tyranny factors. Guided by prior pattern-oriented findings on the ideal leader prototype measure, I specified a four-cluster solution (Bray et al., 2012; Foti et al., 2012). See Table 5 for the ideal leader prototype cluster centers and proportions. See Figure 1 for a graphical depiction of the ideal leader prototype patterns.

The solution replicated the ideal leader prototype patterns found in previous research; the mean scores and the proportions of individuals within each cluster were comparable to those obtained in previous studies (Bray et al., 2012; Foti et al., 2012). The solution reflected Prototypic, Laissez-Faire, Narcissistic, and Anti-Prototypic ideal leader prototypes. The Prototypic subgroup displayed higher than average scores on Sensitivity, Intelligence, and Dedication, and lower than average scores on Tyranny. In contrast, the Anti-Prototypic subgroup displayed the opposite pattern with lower than average Sensitivity, Intelligence, and Dedication scores and higher than average Tyranny scores. The Autocratic subgroup displayed higher than average scores on Dedication, Intelligence, and Tyranny with lower than average scores on Sensitivity. The Laissez-

Faire subgroup displayed low to average scores across all factors.

A multivariate analysis of variance (MANOVA) confirmed the subgroups significantly differed on all ideal leader prototype factors [Λ_{Pillai} = 1.36; F (12, 939) = 64.83, p <.01; η^2 =.45]. See Table 6 for multivariate tests of between-groups differences on ideal leader prototype traits.

For the self-concept, I conducted a K-means cluster analysis using the mean scores for the Extraversion, Agreeableness, Conscientiousness, and Emotional Stability factors. Guided by prior pattern-oriented findings on the Big Five measure, I specified a three-cluster solution; the three self-concept patterns closely resembled the Resilient, Over-Controlled, and Under-Controlled personalities found in previous research (Asendorpfet al., 2001; Asendorpf & Van Aken, 1999; Caspi, 1998; De Fruyt et al., 2002; Rammstedt et al., 2004). Table 7 provides the self-concept cluster centers and proportions. Figure 2 provides a graphical depiction of the self-concept patterns.

The three clusters obtained correspond to the expected patterns for Resilient, Over-Controlled, and Under-Controlled self-concepts; the mean scores and the proportions of individuals within each cluster were comparable to those obtained in previous studies. The Resilient subgroup displayed high scores on all factors. The Over-Controlled subgroup displayed lower Emotional Stability and Extraversion scores with average scores on Agreeableness and Conscientiousness (comparable to the scores of the Resilient pattern). The Under-Controlled subgroup displayed lower scores on Agreeableness, Conscientiousness, and Emotional Stability with average scores on Extraversion (lower than the Resilient pattern but higher than the Over-Controlled pattern). While the scores for the Under-Controlled subgroup are lower than some

studies have previously found (Asendorpf et al., 2001; Asendorpf & Van Aken, 1999; Caspi, 1998), it replicates Rammstedt et al.'s (2004) previous findings and still accurately portrays the pattern of traits associated with externalizing tendencies for maladjustment.

A multivariate analysis of variance (MANOVA) confirmed the subgroups significantly differed on all self-concept factors as a set [$\Lambda_{Pillai} = 1.16$; $F(8, 626) = 108.11$, $p < .01$; $\eta^2 = .58$]. Multivariate tests confirmed the subgroups significantly differed on Extraversion, Emotional Stability, Agreeableness and Conscientiousness. See Table 8 for multivariate tests of between-groups differences on self-concept traits.

The subgroups obtained from the cluster analyses were treated as categorical variables for subsequent analyses. The ideal leader prototype subgroups and self-concept subgroups were dummy coded so they could be entered in the multi-level models for hypothesis testing. The Resilient self-concept and Prototypic ideal leader were coded as the reference groups so analyses compared all other subgroups against the implicit policies held by the Resilient and Prototypic subgroups; these subgroups were selected as reference groups because they are considered the most prototypical patterns (Asendorpf et al., 2001; Epitropaki & Martin, 2004).

Hypothesis Testing for Self-Affirming Leader Definition

Analysis of H1: The self-concept will predict the ideal leader prototype.

In order to assess the first hypothesis, a 3x4 contingency table was first created to assess non-independence between the nominal variables. See Table 9 for the cross-tabulation frequency counts and percentages between ideal leader prototype and self-concept subgroups; see Figure 3 for a graphical depiction. The computed Chi-square and Cramer's V (.30, p < .01) indicated a moderate positive association between the ideal

leader prototype and self-concept. This offered support for the hypothesis. The nature of association between the ideal leader prototype and self-concept was further assessed by examining the counts/percentages and standardized residuals within and between groups (See Table 9).

Within the Resilient subgroup, only 3.4% of individuals described their ideal leader prototype as Anti-Prototypic; their chances of endorsing Anti-Prototypic leaders were significantly lower than would be expected by chance. While the percentage of individuals within the Resilient subgroup that endorsed the Prototypic leader (46.6%) was higher than the percentage endorsing any other leader, the observed count was not significantly higher than would be expected by chance. Rather than showing a strong preference for the leader most similar to them, individuals with Resilient self-concepts showed a strong preference against the leader most dissimilar from them.

Within the Under-Controlled subgroup, individuals endorsed the Anti-Prototypic leader (22.2%) at a higher rate and the Prototypic group (23.8%) at a lower rate than would be expected by chance. However, the percentages of individuals within this subgroup that endorsed Laissez-Faire (24.6%) and Autocratic (29.4%) leaders were comparable, suggesting individuals with Under-Controlled self-concepts had no strong preference for any style of leadership. Within the Over-Controlled subgroup, the percentage of individuals that endorsed the Prototypic (46.6%) and Laissez-Faire (43.1%) leaders was much higher than the percentage of individuals that endorsed the Autocratic (6.9%) and Anti-Prototypic (3.4%) leaders.

Between groups, the Resilient and Over-Controlled subgroups displayed a similar trend for leader definition. Both appeared to idealize the Prototypic and Laissez-Faire

leaders over the Autocratic and Anti-Prototypic leaders. Given the Resilient subgroup's high standings on all efficacious traits, their small chances of endorsing leaders with distinctively high standings on inefficacious leaders are to be expected. The Over-Controlled subgroup could be characterized as introverts with average standings on Emotional Stability, Agreeableness, and Conscientiousness. Thus, one might expect their definition of leadership to be less restrictive than the Resilient group, yet the opposite was found. The Over-Controlled subgroup endorsed the Autocratic leader at only 6.9% compared to the Resilient subgroup who endorsed the Autocratic leader at 20.1%. The Under-Controlled subgroup displayed a different trend for leader definition. With lower standings on all social desirable traits, the subgroup was the most variable and least restrictive in describing their ideal leader. Overall, within- and between- group assessment of contingency results provided partial support for the hypothesis.

Analytic Strategy for Policy-Capturing

I used multi-level modeling to analyze implicit policies for leader perceptions and to examine the influence of self-concept and ideal leader prototype. The technique has been advocated for policy-capturing data because it provides a parsimonious examination of variance within and between individuals or groups (Kristof-Brown et al., 2002, p.988; Mellor, Paley, & Holzworth, 1999; Morrison & Vancouver, 2000). The mean regression equation computed by HLM pools individuals' regression coefficients (beta weights) to determine the average importance of each performance dimension across individuals; this represents the average implicit rating policy for the sample.

I performed two separate multilevel analyses. The first was a two-level hierarchical generalized linear model (HGLM) for leader categorization as a dichotomous

outcome variable to obtain the implicit policy for categorizing leaders versus non-leaders. The second was a two-level hierarchical linear model (HLM) for leader effectiveness as a continuous outcome variable to determine the implicit policy for judging overall effectiveness of leaders (Bryk & Raudenbush, 1992).

In the multilevel models, each level is represented by its own equation. The Level-1 equation estimates perceivers' implicit policies in both the HGLM and HLM; the implicit policies represent the weights attached to managerial performance behaviors in judging leader categorization and effectiveness; the Level-1 equation estimates variability in Planning, Motivating, and Controlling behaviors. The Level-2 equation introduces the ideal leader prototype and self-concept in both the HGLM and HLM; the Level-2 equation estimates differences in implicit policies across ideal leader prototype and self-concept subgroups. Therefore, Level-1 variables are at the within-group level of analysis while Level-2 variables are at the between-group level. Based on the coding scheme, the intercepts in the regression equations derived from HGLM and HLM represented the implicit policies for the reference groups (i.e., Prototypic and Resilient subgroups); the implicit policies for other ideal leader prototype and self-concept subgroups were calculated based on the respective regression coefficients.

Cross-level effects describe the relationship among variables at different levels of analysis. The cross-level effects of the Level-2 variables (i.e., the self-concept and ideal leader prototype dummy codes) on the Level-1 variables were modeled through direct effects on intercepts (i.e., leader categorization and leader effectiveness). The cross-level effects of the Level-2 variables (i.e., the self-concept and ideal leader prototype dummy codes) were modeled as interaction effects through moderation of the slopes for each

managerial performance dimension (i.e., Planning, Motivating, and Controlling

behaviors) (Hofmann, 1997; Klein & Kozlowski, 2000).

Implicit Policies for Leader Categorization

The first set of hypotheses was tested with the HGLM model using restricted

penalized quasi-likelihood (PQL) method of estimation. Refer to Appendix E for all

HGLM Equations for Leader Categorization. The Level-1 model is divided into three

parts: the sampling model, the link function, and the structural model (Raudenbush &

Bryk, 2002). The sampling model distributes the Level-1 outcome Y_{ij}, given the

expected value, μ_{ij}, as Bernoulli with a mean of μ_{ij}, and a variance of $\pi_{ij}(1 - \pi_{ij})$. The link

function transforms the expected outcomes using the logit function, $\eta_{ij} = \frac{\pi_{ij}}{1 - \pi_{ij}}$. The

structural model then casts them into a regression model so regression coefficients can be

computed: $\eta_{ij} = \beta_{0j} + \beta_{1j}X_{1ij} + \beta_{2j}X_{2ij} + \cdots + \beta_{Pj}X_{Pij}$ (Raudenbush & Bryk, 2002). The

Level-2 model is the same as in HLM.

The results for the unit-specific model are reported as opposed to the population-

average model because the primary interest is in describing differences in Level-1

processes (i.e., implicit policies) conditional on Level-2 explanatory variables (i.e., the

ideal leader prototype and self-concept subgroups); further, the unit-specific model

afforded examination of variability between subgroups (Raudenbush & Bryk, 2002).

Unconditional Model. First, the unconditional one-way ANOVA model was fit to

the data to determine a significant amount of variability in leader categorization could be

predicted by higher-level variables. Refer to Model 1 in Table 10 for results from the

unconditional model. The leader categorization variable was entered as the dichotomous

outcome; this dependent variable measured whether managers in the scenarios were

viewed as leaders or non-leaders. The intercept and random coefficient were the Level-2

predictors. The unit-specific estimate for the intercept of leader categorization was -.29

in log odds, which corresponds to 42.8% probability of categorizing any randomly

selected manager as a non-leader; note the 42.8% probability closely matched the mean

for leader categorization presented in the descriptive statistics table (Refer to Table 4).

Results also revealed significant between-person variance (r_0 =.17, p <.01); refer to

Model 1 in Table 9. Therefore, I proceeded to explain this variance in leader

categorization judgments by fitting a baseline HGLM model.

   Baseline Model. Next, I conducted a manipulation check to determine whether

the scenarios produced implicit policies for the categorization of leaders using the

managerial performance dimensions Planning, Motivating, and Controlling. Refer to

Model 2 in Table 10. The Level-1 predictors of whether or not they viewed the manager

as a leader were the manipulated performance behaviors: Planning (β_{1j}), Motivating (β_{2j}),

and Controlling (β_{3j}). The coded values -1 reflecting ineffective and +1 reflecting

effective were entered. Based on the coding scheme, the intercept represented the log

odds of categorizing the typical manager (i.e., the average between the manager

displaying effective behaviors and the manager displaying ineffective behaviors) as a

leader. The slopes represented an increase/decrease in the log odds of categorizing a

manager as leader for every one-unit change expected in performance behaviors.

   The results of the manipulation check indicated individuals displayed implicit

policies in their categorization of leaders using the managerial performance behaviors.

All managerial behaviors were significant predictors of leader categorization. Positive

coefficients for Planning (1.08, p <.001), Motivating (1.41, p <.001), and Controlling

(1.28, p <.001) indicated an increase in the log odds of leader categorization when effective behaviors were displayed over ineffective behaviors. Further, the high correlations among the four slopes revealed the weights work together to form a unified rating scheme (See Model 2 in Table 10). Given the literature suggests these interrelated factors may represent two higher order performance dimensions (i.e., Task or Initiating Structure and Contextual or Consideration), I would caution against interpreting them as unidimensional.

Adjusted Baseline Model. I then tested for order effects to determine whether the order in which the managerial performance dimensions were presented to participants influenced the weight attached to the dimensions. Refer to Model 3 in Table 10 for results from the baseline HGLM model for leader categorization. Dummy codes for presentation order were grand-centered and added as Level-2 predictors of Planning (β_{1j}), Motivating (β_{2j}), and Controlling (β_{3j}) and the intercept (β_{0j}). Significant order effects were detected for Motivating and Controlling behaviors.

After controlling for order effects, all managerial behaviors remained significant predictors of leader categorization. By grand-centering the dummy codes for order effects, estimates for the intercepts and slopes provided the average implicit policy irrespective of presentation order; thus, results for Model 2 and Model 3 were similar: Positive coefficients for Planning (1.08, p <.001), Motivating (1.42 p <.001), and Controlling (1.29, p <.001). Holding all other predictors in the model constant, the odds of categorizing managers as leaders was approximately three (2.95) times more likely when effective Planning behaviors were displayed over average Planning behaviors. Similarly, the odds of categorizing managers as leaders was approximately four (4.14)

times more likely when effective Motivating behaviors were displayed over average Motivating behaviors, holding all other predictors in the model constant. The odds of categorizing managers as leaders was over three (3.63) times more likely when effective Controlling behaviors were displayed over average Controlling behaviors, holding all other predictors in the model constant. The large odds ratios indicated the effects are substantive.

The results of the adjusted baseline model showed individuals displayed implicit policies in their categorization of leaders using the managerial performance behaviors, after controlling for order effects. In terms of absolute values, Motivating had the greatest impact on categorization judgments, followed by Controlling, then Planning for the overall sample. All variance components were significant indicating there is statistically significant variance in the slopes for each of the Level-1 predictors; refer to Model 3 in Table 10. This suggested people differ on the weights for each managerial behavior. Therefore, it was appropriate to examine whether individual differences variables explain between-group differences in the weights.

Implicit Policies for Leader Effectiveness

Unconditional Model. The second set of hypotheses was tested with the HLM model using restricted maximum likelihood method of estimation. Refer to Appendix F for all HLM Equations for Leader Effectiveness. First, the unconditional one-way ANOVA model was fit to the data to determine a significant amount of variability in leader effectiveness ratings could be predicted by higher-level variables. The effectiveness judgments (Y_{ij}) obtained from the Leader Effectiveness Scale were entered as the continuous outcome variable. The intercept and random coefficient were the

Level-2 predictors. Refer to Model 1 in Table 11 for results from the unconditional model.

The coefficient for the intercept was 3.54 suggesting the anchor point for effectiveness rating was slightly below neutral. Results revealed significant between-person variance; refer to Model 1 in Table 11. The computed intra-class correlation (.0217) indicated 2.17% variance lies between people. This small amount of variance indicated the sample was relatively homogenous. Although significant, the limited degree of between-person variance attenuated results at the person level resulting in a conservative investigation of hypotheses. I proceeded to explain this variance in leader effectiveness judgments by fitting a baseline HLM model.

Baseline Model. I conducted a manipulation check to determine whether the scenarios produced implicit policies for the leader effectiveness using the managerial performance dimensions Planning, Motivating, and Controlling; refer to Model 2 in Table 11. The Level-1 predictors of whether or not they viewed the manager as a leader were the manipulated performance behaviors: Planning (β_{1j}), Motivating (β_{2j}), and Controlling (β_{3j}). The coded values -1 reflecting ineffective and +1 reflecting effective were entered. The results of the manipulation check demonstrated the sample displayed implicit policies in their judgment of leader effectiveness using the managerial performance behaviors. I proceeded to test for order effects.

Adjusted Baseline Model. To test for presentation order effects, grand-centered dummy codes for presentation order were added as Level-2 predictors of Planning (β_{1j}), Motivating (β_{2j}), and Controlling (β_{3j}) and the intercept (β_{0j}); refer to Model 3 in Table 11 for results from the baseline HLM model for leader effectiveness. Significant order

effects were detected for the Planning, Motivating and Controlling slopes.

All managerial behaviors remained significant predictors of overall leader effectiveness judgments after controlling for order effects. The squared multiple correlation of .94 indicated there was 94% variance in effectiveness ratings. The computed pseudo r^2 for Level-1 indicated 65.2% of this variance could be explained by including the managerial performance behaviors. This demonstrates the overall sample's rating policy was fairly consistent; in other words, the linear combination of the four leader behaviors adequately modeled the sample's rating policy.

Holding the order effects constant, positive coefficients for Planning (.57, p <.001), Motivating (.78, p <.001), and Controlling (.74, p <.001) indicated an increase in leader effectiveness judgments when these effective behaviors were displayed over average behaviors. Based on the coding scheme, the intercept could be interpreted as the average effectiveness perceived of a typical leader (i.e., a leader falling between the leader who displayed ineffective and the leader that displayed effective behaviors). Each coefficient could be interpreted as the increase in overall effectiveness ratings expected from a one-unit increase in the managerial behavior when all other managerial behaviors were held constant.

The results of the manipulation check supported that individuals displayed implicit policies in their judgment of leader effectiveness using the managerial performance behaviors. Based on absolute values for the overall sample, the impact of the managerial behaviors on effectiveness judgments was the same obtained for categorization judgments: Motivating followed by Controlling, then Planning. Additionally, all variance components were significant indicating there was statistically

significant variance in the slopes for each of the Level-1 predictors; refer to Model 3 in

Table 11. This suggested people differed on the weights for each managerial behavior.

Therefore, it was appropriate to examine whether individual differences variables

explained between-group differences in the weights.

Hypothesis Testing for Self-Affirming Leader Judgment

> *Analysis of H2: The ideal leader prototype will predict leader categorization and*
> *effectiveness judgments, such that the subgroup describing their ideal leader*
> *prototype as Prototypic will categorize fewer managers as leaders and rate them*
> *less effective.*

The second hypothesis was tested by adding the dummy codes for the ideal leader

prototype as the sole Level-2 predictors to the baseline models. To assess support, I

examined the effect of ideal leader prototype on the intercepts (γ_{01}) for leader

categorization (η_{ij}) and leader effectiveness (η_{ij}). Refer to Model 4 in Table 12 for

leader categorization results. Refer to Model 4 in Table 13 for leader effectiveness

results.

Findings for leader categorization showed the Prototypic subgroup was less likely

to categorize managers as leaders compared to the Anti-Prototypic subgroup (.64, p<.01);

having a Prototypic ideal leader prototype decreased the odds of leader categorization by

47.4%. However, there was no significant difference in the intercept for leader

categorization between the Laissez-Faire and Prototypic subgroups (.09, n.s.) nor the

Autocratic and Prototypic subgroups (.23, n.s.). Based on the coding scheme, the

intercept was -.81 for the Prototypic subgroup, -.17 for the Anti-Prototypic subgroup, -.72

for the Laissez-Faire subgroup, and -.58 for the Autocratic subgroup. Overall, leader

categorization findings lend partial support with significant differences found between the number of managers categorized as leaders by the Anti-Prototypic and Prototypic subgroups.

Findings for leader effectiveness showed the Prototypic subgroup viewed managers as significantly less effective compared to the Anti-Prototypic subgroup (.33, p <.05) and the Autocratic subgroup (.16, p <.05). There was no significant difference in the intercept for leader effectiveness between the Laissez-Faire and Prototypic subgroups (.08, n.s.). Based on the coding scheme, the intercept was 3.45 for the Prototypic subgroup, 3.78 for the Anti-Prototypic subgroup, 3.53 for the Laissez-Faire subgroup, and 3.69 for the Autocratic subgroup. Overall, significant differences found in leader effectiveness judgments by the Anti-Prototypic and Prototypic subgroups as well as the Autocratic and Prototypic subgroups supported the hypothesis. With the exception of the Autocratic group, the findings for leader categorization and leader effectiveness are similar.

> *Analysis of H3: The ideal leader prototype will predict implicit policies for leader categorization and effectiveness judgment, such that the subgroup describing their ideal leader prototype as Prototypic will weight Planning, Motivating, and Controlling behaviors more.*

To assess support for the third hypothesis, I examined the effect of ideal leader prototype on the slopes for each of the three performance dimensions in leader categorization (η_{ij}) and effectiveness (η_{ij}): Planning (γ_{11}), Motivating (γ_{21}), and Controlling (γ_{31}). Refer to Model 4 in Table 12 for leader categorization results. Refer to Model 4 in Table 13 for leader effectiveness results.

Leader categorization findings supported Hypothesis 3, indicating the ideal leader prototype explained some variance in the implicit policy for leader categorization. The Prototypic subgroup had the highest weights across all performance dimensions: 1.32_P, 1.55_M, and 1.45_C. In contrast, the Anti-Prototypic subgroup had the lowest weights across all performance dimensions: $.49_P$, 1.00_M, and $.81_C$. The weights for the Laissez-Faire (1.10_P, 1.49_M, and 1.35_C) and Autocratic ($.99_P$, 1.37_M, and 1.20_C) subgroups fell within this range. The differences between the Prototypic and Anti-Prototypic subgroups were significant on all slopes. The Laissez-Faire subgroup and Autocratic subgroups significantly differed from the Prototypic group only on the Planning slope.

Leader effectiveness findings indicated the ideal leader prototype also explained variance in the implicit policy for leader effectiveness. The Prototypic subgroup had the highest weights across all performance dimensions (1.67_P, $.85_M$, and $.82_C$). In contrast, the Anti-Prototypic subgroup had the lowest weights across all performance dimensions ($.31_P$, $.49_M$, and $.43_C$). The intercept and weights for the Laissez-Faire ($.57_P$, $.81_M$, $.78_C$) and Autocratic ($.51_P$, $.78_M$, $.64_C$) subgroups fell in the middle. Significant Prototypic and Anti-Prototypic subgroup differences were obtained in expected directions for all slopes. The Laissez-Faire and Autocratic subgroup differed significantly from the Prototypic subgroup only on the Planning slope. The implicit policies for leader effectiveness mirror those for leader categorization, lending further support for Hypothesis 3.

Analysis of H4: The self-concept will predict leader categorization and effectiveness judgments, such that the subgroup describing their self-concept as Resilient will categorize fewer managers as leaders and rate them less effective. The fourth hypothesis was tested by adding the dummy codes for self-concept as

the sole Level-2 predictor in the baseline models. To assess support for the hypothesis, I examined the effect of the self-concept on the intercept (γ_{01}). Refer to Model 5 in Table 12 for leader categorization results. Refer to Model 5 in Table 13 for leader effectiveness results.

Findings for leader categorization showed the Resilient subgroup was less likely to categorize managers as leaders compared to the Under-Controlled subgroup (.33, p <.05). Having a Resilient self-concept decreased the odds of leader categorization by 28% compared to the Under-Controlled self-concept. However, there was no significant difference in the intercept for leader categorization between the Resilient and Over-Controlled subgroups (.29, n.s.). Based on the coding scheme, the intercept was -.84 for the Resilient subgroup, -.51 for the Under-Controlled subgroup, and -.55 for the Over-Controlled subgroup.

Findings for leader effectiveness mirror those for leader categorization. Results showed the Resilient subgroup perceived managers as less effective compared to the Under-Controlled subgroup (.13, p <.05). The intercept was 3.50 for the Resilient subgroup, 3.79 for the Under-Controlled subgroup, and 3.53 for the Over-Controlled subgroup. The Resilient and Over-Controlled subgroups did not significantly differ (.03, n.s.). Overall, findings lend support for Hypothesis 4.

Analysis of H5: The self-concept will predict implicit policies for leader categorization and effectiveness judgment, such that the subgroup describing their self-concept as Resilient will weight Planning, Motivating, and Controlling behaviors more.

To assess support for the fifth hypotheses, I examined the effect of the ideal

leader prototype on the slopes for each of the three performance dimensions in leader categorization (η_{ij}) and effectiveness (η_{ij}): Planning (γ_{11}), Motivating (γ_{21}), and Controlling (γ_{31}). Refer to Model 5 in Table 12 for leader categorization results. Refer to Model 5 in Table 13 for leader effectiveness results.

Findings indicated the self-concept explained some variance in the implicit policy for leader categorization providing some support for Hypothesis 5. The Resilient subgroup (-.84, 1.18_P, 1.53_M, and 1.42_C) had the highest weights across all performance dimensions followed by the Over-Controlled subgroup (-.55, 1.09_P, 1.48_M, and 1.38_C) then the Under-Controlled subgroup ($.91_P$, $1,29_M$, and 1.04_C). Significant differences between the Resilient and Under-Controlled subgroups were obtained for all slopes; however, no significant differences were found between the Resilient and Over-Controlled subgroups, indicating the two subgroups have a fairly similar implicit policy for leader categorization.

Findings indicated the self-concept also explained variance in the implicit policy for leader effectiveness. The Resilient subgroup exhibited an implicit policy with the highest weights across all performance dimensions ($.64_P$, $.85_M$, and $.81_C$) whereas the implicit policies for the Over-Controlled subgroup ($.62_P$, $.83_M$, and $.79_C$) and Under-Controlled subgroup ($.49_P$, $.70_M$, and $.65_C$) had lower weights. The differences between these weights were not significant for the Resilient and Over-Controlled subgroups, indicating the two patterns have a fairly similar implicit policy for leader effectiveness. All slopes for managerial behaviors were significantly different between the Resilient and Under-Controlled subgroups. Thus, findings regarding implicit policies for leader effectiveness provided some support for Hypothesis 5.

Analysis of H6: The ideal leader prototype will predict leader categorization and effectiveness judgments over the self-concept.

The sixth hypothesis was tested by adding dummy codes for both the self-concept and ideal leader prototype as Level-2 predictors in the baseline models. To assess support for the hypotheses, I examined the simultaneous effect of both individual difference variables on the intercept (γ_{01} and γ_{02}) for leader categorization (η_{ij}) and leader effectiveness (η_{ij}). Refer to Model 6 in Table 12 for leader categorization results. Refer to Model 6 in Table 13 for leader effectiveness results.

Accounting for the effects of both ideal leader prototype and self-concept on leader categorization, only differences attributable to the ideal leader prototype remained significant for the leader categorization intercept. The difference between the Prototypic and Anti-Prototypic subgroups remained significant. Similarly, only the ideal leader prototype effect remained significant for the leader effectiveness intercept when accounting for both the ideal leader prototype and self-concept in the model. Hypothesis 6 was fully supported.

Findings suggest people reference their ideal leader prototype over their self-concept as they make effectiveness and categorization judgments across multiple leaders. More specifically, people with prototypical ideal leader prototypes have a higher threshold for categorizing leaders (and a higher standard for judging effectiveness) than people with anti-prototypical ideal leader prototypes. This finding is novel for leader categorization but corresponds with past findings showing the ideal leader prototype is a more proximal predictor in leader effectiveness judgment (Bray et al., 2012; McElwee et al., 2001; Robson, 2007).

Analysis of H7: The ideal leader prototype will predict implicit policies for leader categorization and effectiveness judgment over the self-concept.

The seventh hypothesis was tested by adding dummy codes for both the self-concept and ideal leader prototype as Level-2 predictors in the baseline models. To assess support for specific hypotheses, I examined the simultaneous effect of both individual difference variables on the slopes for each of the three performance dimensions in leader categorization (η_{ij}) and leader effectiveness (η_{ij}): Planning (γ_{11} and γ_{12}), Motivating (γ_{21} and γ_{22}), and Controlling (γ_{31} and γ_{32}). Refer to Model 6 in Table 12 for leader categorization results. Refer to Model 6 in Table 13 for leader effectiveness results.

Accounting for the effects of both ideal leader prototype and self-concept on the implicit policies for leader categorization, only differences attributable to the ideal leader prototype remained significant. Differences between the Prototypic and Anti-Prototypic subgroups remained significant for all slopes. Additionally, differences between the Prototypic and Laissez-Faire subgroups remained significant for the Planning slope. Accounting for both predictors' effects on the implicit policies for leader effectiveness, the effects of the ideal leader prototype remained significant. The same ideal leader prototype subgroup differences were obtained as those found for leader categorization. Thus, Hypothesis 7 was supported. Surprisingly, the effects of the self-concept also remained significant. Differences between the Resilient and Over-Controlled subgroups remained significant for all slopes.

The results are novel. As expected, findings regarding the implicit policies for leader categorization suggest the relationship between the self-concept and leader

categorization may be fully mediated by the ideal leader prototype. Unexpectedly, findings regarding the implicit policies for leader effectiveness suggest the relationship between the self-concept and leader categorization may be partially mediated by the ideal leader prototype. This means people weight managerial behaviors that match their ideal leader prototype across categorization judgments. Across effectiveness judgments, people weight managerial behaviors that match both their ideal leader prototype and self-concept.

VII. DISCUSSION

The purpose of the study was to examine the interrelationships among the ideal leader prototype and self-concept on leader categorization and effectiveness judgments in a pattern-oriented framework. The body of research that predicates the present study demonstrates these interrelationships exist by means of bivariate correlation and mediation analyses in addition to group differences in composite effectiveness ratings for a single leader (with the exception of Foti et al., 2012; Bray et al., 2012). Moving away from this paradigm, the study investigated both the independent and dependent variables as patterns rather than individual variables to provide a more fitting examination of self-affirming leader definition and judgment. The employed design and analysis simulated how people weigh information about performance behaviors to form overall judgments across multiple leaders, and showed weighting was predicted by the ideal leader prototypes and/or self-concepts. In general, the findings were fairly consistent with the study's hypotheses.

Upon examining the sole impact of the ideal leader prototype on implicit policies for leader judgments, findings revealed overall judgments and implicit policies were, in

part, attributable to the ideal-leader prototype for both leader categorization and leader effectiveness. Findings supported Leader Categorization Theory's premise that a match with the ideal leader prototype drives leader categorization and effectiveness judgments (Cronshaw & Lord, 1982; Lord et al., 1984).

In summary, the Prototypic subgroup (i.e., high Intelligence, high Dedication, high Sensitivity, and low Tyranny) categorized fewer managers as leaders and weighed Planning, Motivating, and Controlling behaviors more in their judgment to categorize leaders versus non-leaders. The Prototypic subgroup's higher threshold for leadership and stringent policy allowed them to self-affirm by categorizing fewer managers among the efficacious leader category and emphasizing leader behaviors reflecting their traits to discriminate between leaders and non-leaders. Likewise, the Prototypic subgroup's higher standard for leadership allowed them to self-affirm in effectiveness judgments by rating managers lower on average and emphasizing leader behaviors reflecting their traits to discriminate levels of effectiveness.

In contrast, the Anti-Prototypic subgroup (i.e., low Intelligence, low Dedication, low Sensitivity, and high Tyranny) categorized greater numbers of managers as leaders, rated managers as more effective on average, and weighed Planning, Motivating, and Controlling behaviors less across judgments. The Anti-Prototypic subgroup's lower threshold and lenient policy mirrored their lower standing on efficacious leader traits. The Anti-Prototypic subgroup's implicit policy did not reflect an inability to discriminate but an intention not to discriminate with great emphasis placed on Planning, Motivating, and Controlling behaviors. This allowed them to self-affirm by minimizing performance differences so as not to exclude themselves from efficacious categories.

The thresholds/standards and implicit policies for the Laissez-Faire and Autocratic subgroups fell in the middle. Fewer significant differences were found between the Laissez-Faire/Autocratic subgroups and the Prototypic subgroup (i.e., the intercept and/or Planning slopes) despite having significant different scores on the ideal leader prototype traits. This may be attributed to the behaviors reflected in the performance dimensions. For example, one might expect the Autocratic group (high on Tyranny) to weigh Controlling behaviors higher than the Prototypic group; however, the Controlling dimension spoke to controlling and monitoring in proactive and passive manners as opposed to a manipulative or despotic manner.

Upon examining the sole impact of the self-concept on implicit policies for leader judgments, there was comparable support for the self-concept. Findings revealed overall judgments and implicit policies were, in part, attributable to the self-concept for both leader categorization and leader effectiveness. Findings for the self-concept corroborated self-projection theory. These effects were observed in the differences between the Resilient (i.e., high Extraversion, high Emotional Stability, high Agreeableness, and high Conscientiousness) and Under-Controlled (i.e., average Extraversion, low Emotional Stability, low Agreeableness, and low Conscientiousness) subgroups. Compared to the Under-Controlled subgroup the Resilient subgroup categorized fewer numbers of managers as leaders, rated managers as less effective on average, weighed Planning, Motivating, and Controlling behaviors more across categorization and effectiveness judgments; in this manner, they self-affirmed by associating themselves among the selective considered 'leader' and 'effective'.

The Over-Controlled (i.e., low Extraversion, average Emotional Stability, average

Agreeableness, and average Conscientiousness) subgroup did not differ from the Resilient subgroup in any respect for leader categorization and effectiveness judgments despite significant differences on the self-concept traits. The lack of significant differences might be attributed in part to the operationalization of the performance dimensions. For example, one might expect differences on the Motivating dimension reflected more charismatic and inspirational behaviors, given the Over-Controlled subgroup's distinctively low standing on Extraversion. One might also interpret findings regarding the Over-Controlled self-concept versus the Under-Controlled self-concept in light of their tendencies for internalized maladaptive behaviors (e.g., social withdrawal) versus externalized (e.g., aggression and disruption) (Cole et al., 1995; Rubin et al., 1995). Thus, the Over-Controlled subgroup did not evoke as lenient an implicit policy as the Under-Controlled subgroup because they were more likely to engage in overt efficacious behaviors.

The study also sought to provide a more fair and stringent test of the self-concept and ideal leader prototype as predictors of leader judgment. This is a particularly important contribution to the literature because theorists posit the three variables are linked via a full mediation framework, yet most researchers have cross-sectionally measured their interrelationships using the same operationalizations for all study variables (Bray et al., 2012; McElwee et al., 2001; Robson, 2007). To overcome the limitations in previous work, the present study employed different operationalizations for all study variables, introduced a time lag between the predictors and dependent variables, and counterbalanced presentation order of the predictors. These strengths in the study's design are most pertinent to testing the association between the ideal leader prototype and

self-concept as well as the dual impact of the ideal leader prototype and self-concept on implicit policies for leader judgment.

A Contingency analysis was performed to assess correspondence between the self-concept and ideal leader prototype. Overall, results corroborated previous research showing the self-concept influences the ideal leader prototype. This aligned with previous findings showing individuals construct ideal leader prototypes in their own image (Foti et al., 2012; Keller, 1999; McElwee et al., 2001; Robson, 2007). Upon more thorough examination of the nature of association within and between groups, the amount of correspondence between specific self-concept patterns and ideal leader prototype patterns were not as high as estimates obtained in previous studies (Bray et al., 2012; Foti et al., 2012). Receiving less support for the similarity hypothesis than previous pattern studies is likely due to the present study's more stringent test of the hypothesis. Given the self-concept and ideal leader prototype were measured on two different scales, it is likely the relationship was overestimated in studies using the same scales for both variables.

Nonetheless, the trends displayed indicate tendencies to self-affirm in leader definition. Within subgroups, individuals did not display a strong preference for the one leader most similar to themselves. Between subgroups, individuals who saw themselves in a more efficacious light idealized more prototypical leader styles. The Resilient and Over-Controlled subgroups had strikingly similar trends for leader definition with one exception; both endorsed the Prototypic and Laissez-Faire leaders at much higher rates than they endorsed the Anti-Prototypic and Autocratic leaders. This may not be too surprising in light of the similarity observed between the implicit policies for the Over-

Controlled and Resilient subgroups. However, fewer individuals within the Over-Controlled subgroup endorsed the Autocratic leader compared to individuals within the Resilient subgroup. One might posit individuals with Over-Controlled self-concepts prefer to maintain control over themselves, leading them to endorse leaders high on Tyranny at a significantly lower rate. The correspondence between the Resilient and Over-Controlled self-concepts with Prototypic and Laissez-Faire ideal leader prototypes support the similarity hypothesis.

Compared to the former groups, those with less efficacious images of themselves were more likely to idealize the anti-prototypical leader style. The Under-Controlled subgroup did not bolster arguments for the similarity hypothesis given the number of individuals within the subgroup did not display a strong bias toward the Anti-Prototypic or Autocratic leaders. Instead, individuals within this subgroup displayed no bias with the greatest variability in correspondence. This was not too surprising given their standards of leadership were expected to be the lowest or least discriminating (Bray et al., 2012). In this way, the results lend support for the notion of self-affirming projection in describing the leader prototype.

The final hypotheses predicted the ideal leader prototype would contribute unique variance in the prediction of leader judgment and implicit policies over the self-concept. While the results for the isolated effects of each individual difference variable were fairly similar across leader effectiveness and leader categorization models, the results for the simultaneous effects of the individual difference variables were surprisingly different. For both leader categorization and effectiveness, the ideal leader prototype predicted unique variance in overall leader judgment (i.e., the intercept) over the self-concept.

These results support the hypothesis and corroborate the full mediation framework validated in previous research. People relied on their ideal leader prototype, and not their self-concept in deciding the threshold for categorizing leaders versus non-leaders and the standard for discriminating levels of effectiveness. The results suggest the self-concept's impact is completely accounted for in the ideal leader prototype. Keeping in mind the self-concept's direct impact on the ideal leader prototype, overall judgments for both leader categorization and effectiveness are considered self-affirming by way of an indirect rather than a direct effect.

Similarly, only those group differences attributable to the ideal leader prototype remained significant in the prediction of implicit policies for leader categorization when the model accounted for both ideal leader prototype and self-concept variables. These results supported the hypothesis and corroborated the full mediation framework validated in previous research. All significant group differences for both the ideal leader prototype and self-concept remained significant in the prediction of implicit policies for leader effectiveness when accounting for both predictors in the model.

These results were particularly novel in testing the dual effect of the ideal leader prototype and self-concept as they suggest a partial mediation framework is more appropriate (Bray et al., 2012; McElwee et al., 2001; Robson, 2007). This means implicit policies for leader categorization can be considered self-affirming because weights reflect egocentric standards of leadership (i.e., the self-affirming ideal leader prototype). Thus, the self-concept indirectly impacts implicit policies for leader categorization through the ideal leader prototype. On the other hand, the implicit policies for leader effectiveness are self-affirming because weights reflect egocentric standards of leadership (i.e., the

self-affirming leader prototype) and broader egocentric standards of personality (i.e., the self-concept). Thus, the self-concept directly and indirectly impacts implicit policies for leader effectiveness.

Findings indicate the self-concept may not be considered as distal to judgments of leader effectiveness as previously posited. One might posit that the construction of the ideal leader prototype in one's own image precludes the need to self-project in leader categorization; in defining one's ideal leader prototype, the individual had already associated themselves with the leader category and dissociated themselves with the non-leader category. This did not appear to be the case for leader effectiveness. Although the ideal leader prototype was typically associated with the image of an effective leader, this may not necessarily always be the case (Schyns & Schilling, 2010). Thus, self-projection in leader effectiveness judgments may provide additional affirmation; to self-project in leader effectiveness judgment is to associate oneself with the effective leader category and dissociate oneself from the ineffective leader category.

The unique variance accounted for by the self-concept for leader effectiveness was not found in previous research (Bray et al., 2012; McElwee et al., 2001). This might be attributable to the unique measures of the ideal leader prototype and self-concept employed in the present study. It is also likely policy-capturing affords a better detection of self-concept effects because the design addresses questions regarding how people weight performance behaviors in forming leader judgments rather than how people form judgments through heuristic processing. The findings may also differ given a greater number of leader profiles were rated than in previous studies. Results suggest support for the full mediation model obtained in previous studies may be due to methodological

artifact.

Implications and Limitations

Study results have potential implications for exchanges between leader and follower. First, it is important to recognize the definition of an ideal or effective leader is not the same for all (Foti et al., 2012; Schyns & Schilling, 2010). This is evident based on the emergence of different ideal leader prototype patterns. While the Prototypic leader was expected, the endorsement of Anti-Prototypic and Autocratic as ideal leaders could be considered a surprise to some. Further, individuals with different self-concepts and ideal leader prototypes are likely to view the same manager differently. When context is accounted for, there is not one ideal leadership style (Fiedler, 1964).

Findings suggest leaders are more likely to be received as leaders and perceived more favorably if they are similar to their subordinates' self-concepts and ideal leader prototypes. Based on the study's results, organizations should consider subordinates' self-concepts and ideal leader prototypes in the assignment of managers. For example, a manager who displays several effective planning behaviors is likely to be recognized as a leader by subordinates who see Intelligence and Conscientiousness as strong distinctive factors within themselves and their ideal leaders.

While this notion seems plausible for matching managers and subordinates with high standings on efficacious traits, the idea of selecting and matching managers with low standings on efficacious traits to appease similar followers does not seem as appealing. Recall individuals with low standings on efficacious traits are less stringent and discriminating across their evaluations of managers compared to their individuals with higher standings. In this manner, they are more likely to endorse lower performing

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managers. Therefore, the manager who displays several effective planning behaviors is more likely to be recognized as a leader by a greater number of subordinates compared to the leader who displays fewer effective planning behaviors. Thus, subordinates' self-concepts are more critical for managers with low standings on relevant traits; when subordinates' see themselves as highly competent in these areas, managers with low standings are not likely to fare well (Beauregard & Dunning, 1998).

The idea becomes more complex when we consider the self-concept and ideal leader prototype are comprised of a pattern of traits. The interaction among traits within the self-concept and ideal leader prototype may indicate a preference for goal-oriented behaviors over person-oriented behaviors in a leader. The most effective leaders will be those who are aware or knowledgeable of their follower's expectations and able to adapt their behaviors. This is more easily managed in a dyadic relationship; however, managers and leaders in organizations often interact with groups of employees. It is probable that ideal leader prototypes can also be considered at the group-level. This becomes more relevant in the context of teams where members are more likely have shared understanding and consensus in their norms and expectations (Hogg & Terry, 2000). Evaluation processes wherein managers are able to collect feedback from subordinates (e.g., 360 feedback systems) can facilitate awareness and conversations around what followers expect in their leaders. Explicit conversations around team norms may also allow organizations to gauge whether a particular leadership style is best suited for a particular group or department.

Bridging the current study with findings from prior research, implications to followers and leaders extend beyond perceptions. Previous studies showed followers

may be more positively impacted by leaders they view as similar to their selves or their ideal leaders; similarity between these variables and leaders have been linked to enhanced leader-member, employee attitudes, and well-being (Engle & Lord, 1997; Epitropaki & Martin, 2005).

van Gils, van Quaquabeke, and van Knipenberg (2010) posited the quality of relationship between leader and follower depends on both the leader's and follower's contributions and reciprocation in the dyadic relationship. One's level of reciprocation in that relationship largely depends on their perception of the other's contributions; thus, the follower's expectations of the leader (i.e., the ideal leader prototype) and the extent to which the leader meets them is important to the leader-follower relationship. Further, the experienced quality of the leader-follower relationship has been shown to motivate follower performance and satisfaction (Graen & Uhl-Bien, 1995; van Gils et al., 2010). For these reasons, the benefits to the follower may be greater when pairings between mentor-mentee, leader-member, manager-employee, leader development coach-trainee consider perceivers' ideal leader prototypes.

Thus, followers and managers will be better served by ensuring subordinates with efficacious standings are matched to leaders who excel in those same areas. Additionally, organizations should avoid placing managers who display less effective behaviors with subordinates who possess higher standards in those areas. Note this strategy is not necessarily equivalent to selecting/matching prototypical leaders with high-performing followers and anti-prototypical leaders with low-performing followers. Given business models do not typically support anti-prototypical leader styles, the overarching recommendation is to be cognizant of the expectations for leaders embodied

in followers' self-concepts and ideal leader prototypes, and to put managers in place that facilitate their acceptance as a leader. Be aware the biggest challenge lies with matching leaders to followers who possess the highest standards.

Additionally, giving followers exposure to leaders similar to their self-concepts may also be beneficial in developing followers' leadership skills or likelihood of assuming leadership. Derue & Ashford (2010, p.628) posited leader and follower identities reside within individual's self-concept, but are also "socially constructed and inherently related (e.g., example, to grant one person a leader identity frequently instantiates a follower identity for others)". In light of the studies findings, granting a similar other a leader identity allows one to think of themselves as leader-like. Moreover, given leadership is a mutual influence process among individuals, social interaction may and contextual factors may change leader-follower identities over time and/or across situations. Thus, providing followers or employees a leader/mentor/manager that matches their self-concept or models those traits they personally regard higher within themselves, may facilitate the process of followers internalizing an identity as leader and eventually taking on the role of a leader (Derue & Ashford 2010; Lockwood & Kunda, 2000).

In the context of leader development, the idea of matching a manager with low standings to a follower with low standings becomes appealing. Assuming mentors are selected based on some credentials of merit, pairing a mentor with a low standing on some efficacious trait with a follower who sees themselves as low on the same trait provides the opportunity for the subordinate to observe how a successful manager performs or adapts in spite of the low standing. Who would be better to model leadership

for an introvert than a successful introvert? A successful introverted manager may be able to provide better insight on balancing the need for personal space with satisfying the social demands of a job. Additionally, a successful manager of lower intelligence may provide better insight on they rely on those around him/her for technical expertise. In this manner, matching similar mentors and follower allows followers to see themselves in the leader role and teaches them effective ways to adapt their behavior in spite of their personal shortcomings.

The findings must be considered in light of the study's limitations. The ICC indicated the sample was relatively homogeneous which attenuated the amount of variance to explain between groups. This may be attributable to the sample being comprised of students from the same course. Ideally, future studies would examine the relationships in a combined student and work sample. It is also feasible to conceive of the traditional procedure for developing policy-capturing scenarios as a limitation in the present study. In order to be included in the scenarios, all managerial performance behaviors had to meet a consensus criterion. This posed a challenge for the present study, which applied a pattern-approach. For example, those managerial performance behaviors considered effective by means of the consensus criterion excluded some behaviors that a smaller number of individuals (e.g., the subgroup with the Anti-Prototypic pattern) might have considered effective. This challenge also served to attenuate variance. A replication study might consider clustering the pilot sample into ideal leader prototype and self-concept patterns, and selecting behaviors that meet consensus within clusters.

In general, there are tradeoffs with using a policy capturing approach. The policy capturing methodology relies on scripted profiles, which enhances claims of internal validity, but unfortunately limits claims of external validity; because all leader profiles were hypothetical 'paper people' it may be difficult to generalize findings to real leaders.

In addition, significant order effects were found for the presentation of managerial performance dimensions, in spite of employing a common method for the presentation of dimensions and dimension order within the policy-capturing scenarios (Kristof-Brown et al., 2002; Sinclair, 2002). This effect may be more likely in the present study given the student sample and/or the limited amount of content presented in the scenario. It is possible that providing additional content beyond the text for manipulated performance dimensions would make the presentation order of the performance dimensions less prominent. The intra-rater reliability and fatigue effects test for the leader effectiveness model were other indicators that suggested the data was not problematic beyond the order effects. I addressed the order effects by controlling for them in all analyses.

Future Directions

There is great practical application in understanding the inner mechanisms and impact of follower perception as it relates to leader-member, manager-employee, mentor, and role model relationships in addition to, personal leadership aspirations (Lockwood & Kunda, 2000). Recent leadership theories acknowledge leaders operate in social contexts encompassing different ideals and expectations regarding leaders; one way of integrating social context into leader development is by examining followers' self-concepts and ideal leader prototypes (Schyns et al., 2011; Shondrick et al., 2010). Consideration of followers' cognitive structures and processes may be worthwhile in terms of providing

insight regarding when individuals should attempt to occupy leader roles and the likelihood of more positive reactions and judgments (DeRue & Ashford, 2010). From this perspective, the study contributes to understanding who is likely to be received as leader and to what extent they are judged as effective accounting for both leader behavior and social context (i.e., the followers).

A natural extension for this research would be the examination of the implied link between leader effectiveness perceptions and outcomes for the leader-follower relationship or follower outcomes in greater depth. Outcome variables of interest may include trust of leader, liking of leader, commitment to leader, the follower's willingness or likelihood to assume a leadership role among others. Such a study might be more pertinent conducted outside of an experimental setting.

When studying the impact of individual difference variables, it is befitting to also consider the impact of context. The current study examined leader perceptions of business managers. Future researchers might examine whether there are differences in weights attached to attributes of leaders in different contexts (e.g., military leaders, religious leaders, political leaders, etc.). This is especially interesting since people are likely to hold different ideal leader prototypes for the different types of leaders (Lord et al., 1984). One could also examine whether the context the perceiver resides in may explain between-person differences in weights. For example, individuals belonging to different organizational or educational cultures may have different opinions of what leader effectiveness is due to their culture.

Additionally, future research may consider extending the testing of covariates of interest in prior ILT research such as gender, age, race, organizational tenure, or

leadership experience to the current framework. Researchers could examine whether and to what extent such variables regarding the perceiver and/or the leader explain between-person differences in implicit rating policies for leader categorization or judgment.

In closing, the nature of the current experimental design permitted gathering a greater understanding of the mechanisms underlying the link between traits within the self-concept and ideal leader prototypes and judgments of leaders. The study illustrated the self-affirming nature of leader definition and leader judgment in manner that taps into the crux of the similarity hypothesis. It elucidated how unique subgroups of people managed their judgments by utilizing information about different leader behaviors to affirm the images they held of themselves and their ideal leaders. This is more than one can ascertain from examining these trait variables and composite leader ratings in isolation and at one measurement occasion.

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IX. APPENDICES

Appendix A

Managerial Performance Scenarios

Order #1: Plan-Motivate-Control

1. H-H-H
   Manager #1 Processes and evaluates a variety of information before making a decision that significantly affect employees or customers, Presents awards to deserving employees, and Analyzes the effectiveness of operations.

2. H-H-L
   Manager #2 Prepares contracts with great attention to detail, Launches programs to build morale in the company, and Ignores complaints/questions from customers.

3. H-L-H
   Manager #3 Considers legal and ethical constraints when making decisions regarding employees or customers, Has poor relationships with his/her business associates, and Analyzes operations to discover inefficient use of equipment.

4. L-H-H
   Manager #4 Loses sight of business strategy in creating the work unit's plan, Presents awards to deserving employees, and Investigates and settles employee grievances/complaints.

5. L-L-H
   Manager #5 Relies on old guidelines in new situations regardless of their applicability, Misrepresents group accomplishments as personal accomplishments in work reports, and Implements standardized review processes for quality control.

6. H-L-L
   Manager #6 Evaluates the costs and benefits of alternative solutions to problems before making decisions, Provides no performance goals to motivate subordinates, and Fails to monitor or enforce compliance with government/law regulations.

7. L-H-L
   Manager #7 Hesitates to make decisions concerning the future direction of operations when required, Maintains good relationships with business associates, and Does not check on subordinates' productivity.

8. L-L-L

Manager #8 Is not interested in the industry's up-and-coming technology, Provides little opportunity for even the most deserving employees to advance, and Disregards important customers who are dissatisfied.

9. H-H-H
Manager #9 Determines the strategic business plan of the work unit, Motivates subordinates to improve performance through a process of goal setting and positive reinforcement, and Evaluates the outcomes of internal improvement projects.

10. H-H-L
Manager #10 Is involved in establishing profit objectives for the company, Considers other people as his/her equal, and Fails to monitor or enforce compliance with government/law regulations.

11. H-L-H
Manager #11 Prepares plans to ensure adequate supply of materials, Aggravates issues for employees who file complaints/grievances, and Conducts formal performance appraisals with subordinates.

12. L-H-H
Manager #12 Does not bother to learn about competitor's practices, Is proud to tell people that he works for the company, and Monitors compliance with government laws/regulations and implement corrective action.

13. L-L-H
Manager #13 Hesitates to make decisions concerning the future direction of operations when required, Misrepresents group accomplishments as personal accomplishments in work reports, and Controls quality of products and services.

14. H-L-L
Manager #14 Identifies new markets for company products or services, Provides little opportunity for even the most deserving employees to advance, and Ignores complaints/questions from customers.

15. L-H-L
Manager #15 Is not interested in the industry's up-and-coming technology, Counsels subordinates about their professional development, and Conducts inadequate assessments of internal improvement projects.

16. L-L-L
Manager #16 Loses sight of business strategy in creating the work unit's plan, Provides no performance goals to motivate subordinates, and Conducts inadequate assessments of internal improvement projects.

17. H-H-H

Manager #17 Plans the best use of available facilities, Builds sense of pride by helping work groups define their purpose, and Takes necessary action to prevent and resolve alleged discriminatory practices.

18. H-H-L

Manager #18 Is able to make decisions concerning the future direction of operations, Rewards additional responsibilities assumed by his employees with salary raises, and Disregards important customers who are dissatisfied.

19. H-L-H

Manager #19 Develops milestones, due dates, and responsibilities for projects, plans, and activities to help employees progress in their work, Has poor relationships with business associates, and Critically analyzes reports containing statistical and numerical information.

20. L-H-H

Manager #20 Relies on old guidelines in new situations regardless of their applicability, Creates a favorable impression for the company with new employees, and Frequently reviews and provides feedback concerning the accuracy and efficiency of subordinates.

21. L-L-H

Manager #21 Is not interested in the industry's up-and-coming technology, Aggravates issues for employees who file complaints/grievances, and Analyzes reasons for rejects in production.

22. H-L-L

Manager #22 Stays informed about the latest technical developments in his/her professional area, Provides little opportunity for even the most deserving employees to advance, and Is slow to react to crisis or emergency.

23. L-H-L

Manager #23 Does not bother to learn about competitor's practices, Provides recognition, encouragement, and constructive feedback regarding subordinate job performance, and Is slow to react to crisis or emergency.

24. L-L-L

Manager #24 Loses sight of business strategy in creating the work unit's plan, Has poor relationships with business associates, and Does not check on subordinates' productivity.

25. H-H-H

Manager #9B Determines the strategic business plan of the work unit, Motivates subordinates to improve performance through a process of goal setting and positive reinforcement, and Evaluates the outcomes of internal improvement projects.

26. H-H-L

Manager #10B Is involved in establishing profit objectives for the company, Considers other people as his/her equal, and Fails to monitor or enforce compliance with government/law regulations.

27. H-H-H

Manager #17B Plans the best use of available facilities, Builds sense of pride by helping work groups define their purpose, and Takes necessary action to prevent and resolve alleged discriminatory practices.

28. H-H-L

Manager #18B Is able to make decisions concerning the future direction of operations, Rewards additional responsibilities assumed by his employees with salary raises, and Disregards important customers who are dissatisfied.

Order #2: Motivate-Control-Plan

1. H-H-H

Manager #1 Presents awards to deserving employees, Analyzes the effectiveness of operations, and Processes and evaluates a variety of information before making a decision that significantly affect employees or customers.

2. H-H-L

Manager #2 Launches programs to build morale in the company, Ignores complaints/questions from customers, and Prepares contracts with great attention to detail.

3. H-L-H

Manager #3 Has poor relationships with his/her business associates, Analyzes operations to discover inefficient use of equipment, and Considers legal and ethical constraints when making decisions regarding employees or customers.

4. L-H-H

Manager #4 Presents awards to deserving employees, Investigates and settles employee grievances/complaints, and Loses sight of business strategy in creating the work unit's plan.

5. L-L-H

Manager #5 Misrepresents group accomplishments as personal accomplishments in work reports, Implements standardized review processes for quality control, and Relies on old guidelines in new situations regardless of their applicability.

6. H-L-L

Manager #6 Provides no performance goals to motivate subordinates, Fails to monitor or enforce compliance with government/law regulations, and Evaluates the costs and benefits of alternative solutions to problems before making decisions.

7. L-H-L

Manager #7 Maintains good relationships with business associates, Does not check on subordinates' productivity, and Hesitates to make decisions concerning the future direction of operations when required.

8. L-L-L

Manager #8 Provides little opportunity for even the most deserving employees to advance, Disregards important customers who are dissatisfied, and Is not interested in the industry's up-and-coming technology.

9. H-H-H

Manager #9 Motivates subordinates to improve performance through a process of goal setting and positive reinforcement, Evaluates the outcomes of internal improvement projects, and Determines the strategic business plan of the work unit.

10. H-H-L

Manager #10 Considers other people as his/her equal, Fails to monitor or enforce compliance with government/law regulations, and Is involved in establishing profit objectives for the company.

11. H-L-H

Manager #11 Aggravates issues for employees who file complaints/grievances, Conducts formal performance appraisals with subordinates, and Prepares plans to ensure adequate supply of materials.

12. L-H-H

Manager #12 Is proud to tell people that he works for the company, Monitors compliance with government laws/regulations and implement corrective action, and Does not bother to learn about competitor's practices.

13. L-L-H

Manager #13 Misrepresents group accomplishments as personal accomplishments in work reports, Controls quality of products and services, and Hesitates to make decisions concerning the future direction of operations when required.

14. H-L-L

Manager #14 Provides little opportunity for even the most deserving employees to advance, Ignores complaints/questions from customers, and Identifies new markets for company products or services.

15. L-H-L

Manager #15 Counsels subordinates about their professional development, Conducts inadequate assessments of internal improvement projects, and Is not interested in the industry's up-and-coming technology.

16. L-L-L

Manager #16 Provides no performance goals to motivate subordinates, Conducts inadequate assessments of internal improvement projects, and Loses sight of business strategy in creating the work unit's plan.

17. H-H-H

Manager #17 Builds sense of pride by helping work groups define their purpose, Takes necessary action to prevent and resolve alleged discriminatory practices, and Plans the best use of available facilities.

18. H-H-L

Manager #18 Rewards additional responsibilities assumed by his employees with salary raises, Disregards important customers who are dissatisfied, and Is able to make decisions concerning the future direction of operations.

19. H-L-H

Manager #19 Has poor relationships with business associates, Critically analyzes reports containing statistical and numerical information, and Develops milestones, due dates, and responsibilities for projects, plans, and activities to help employees progress in their work.

20. L-H-H

Manager #20 Creates a favorable impression for the company with new employees, Frequently reviews and provides feedback concerning the accuracy and efficiency of subordinates, and Relies on old guidelines in new situations regardless of their applicability.

21. L-L-H

Manager #21 Aggravates issues for employees who file complaints/grievances, Analyzes reasons for rejects in production, and Is not interested in the industry's up-and-coming technology.

22. H-L-L

Manager #22 Provides little opportunity for even the most deserving employees to advance, Is slow to react to crisis or emergency, and Stays informed about the latest technical developments in his/her professional area.

23. L-H-L

Manager #23 Provides recognition, encouragement, and constructive feedback regarding subordinate job performance, Is slow to react to crisis or emergency, and Does not bother to learn about competitor's practices.

24. L-L-L

Manager #24 Has poor relationships with business associates, Does not check on subordinates' productivity, and Loses sight of business strategy in creating the work unit's plan.

25. H-H-H

Manager #9B Motivates subordinates to improve performance through a process of goal setting and positive reinforcement, Evaluates the outcomes of internal improvement projects, and Determines the strategic business plan of the work unit.

26. H-H-L

Manager #10B Considers other people as his/her equal, Fails to monitor or enforce compliance with government/law regulations, and Is involved in establishing profit objectives for the company.

27. H-H-H

Manager #17B Builds sense of pride by helping work groups define their purpose, Takes necessary action to prevent and resolve alleged discriminatory practices, and Plans the best use of available facilities.

28. H-H-L

Manager #18B Rewards additional responsibilities assumed by his employees with salary raises, Disregards important customers who are dissatisfied, and Is able to make decisions concerning the future direction of operations.

Order #3: Control-Plan-Motivate

1. H-H-H

Manager #1 Analyzes the effectiveness of operations, Processes and evaluates a variety of information before making a decision that significantly affect employees or customers, and Presents awards to deserving employees.

2. H-H-L

Manager #2 Ignores complaints/questions from customers, Prepares contracts with great attention to detail, and Launches programs to build morale in the company.

3. H-L-H

Manager #3 Analyzes operations to discover inefficient use of equipment, Considers legal and ethical constraints when making decisions regarding employees or customers, and Has poor relationships with his/her business associates.

4. L-H-H

   Manager #4 Investigates and settles employee grievances/complaints, Loses sight of business strategy in creating the work unit's plan, and Presents awards to deserving employees.

5. L-L-H

   Manager #5 Implements standardized review processes for quality control, Relies on old guidelines in new situations regardless of their applicability, and Misrepresents group accomplishments as personal accomplishments in work reports.

6. H-L-L

   Manager #6 Fails to monitor or enforce compliance with government/law regulations, Evaluates the costs and benefits of alternative solutions to problems before making decisions, and Provides no performance goals to motivate subordinates.

7. L-H-L

   Manager #7 Hesitates to make decisions concerning the future direction of operations when required, Maintains good relationships with business associates, and Does not check on subordinates' productivity.

8. L-L-L

   Manager #8 Disregards important customers who are dissatisfied, Is not interested in the industry's up-and-coming technology, and Provides little opportunity for even the most deserving employees to advance.

9. H-H-H

   Manager #9 Evaluates the outcomes of internal improvement projects, Determines the strategic business plan of the work unit, and Motivates subordinates to improve performance through a process of goal setting and positive reinforcement.

10. H-H-L

    Manager #10 Fails to monitor or enforce compliance with government/law regulations, Is involved in establishing profit objectives for the company, and Considers other people as his/her equal.

11. H-L-H

    Manager #11 Conducts formal performance appraisals with subordinates, Prepares plans to ensure adequate supply of materials, and Aggravates issues for employees who file complaints/grievances.

12. L-H-H

Manager #12 Monitors compliance with government laws/regulations and implement corrective action, Does not bother to learn about competitor's practices, and Is proud to tell people that he works for the company.

13. L-L-H
    Manager #13 Controls quality of products and services, Hesitates to make decisions concerning the future direction of operations when required, and Misrepresents group accomplishments as personal accomplishments in work reports.

14. H-L-L
    Manager #14 Ignores complaints/questions from customers, Identifies new markets for company products or services, and Provides little opportunity for even the most deserving employees to advance.

15. L-H-L
    Manager #15 Conducts inadequate assessments of internal improvement projects, Is not interested in the industry's up-and-coming technology, and Counsels subordinates about their professional development.

16. L-L-L
    Manager #16 Conducts inadequate assessments of internal improvement projects, Loses sight of business strategy in creating the work unit's plan, and Provides no performance goals to motivate subordinates.

17. H-H-H
    Manager #17 Takes necessary action to prevent and resolve alleged discriminatory practices, Plans the best use of available facilities, and Builds sense of pride by helping work groups define their purpose.

18. H-H-L
    Manager #18 Disregards important customers who are dissatisfied, Is able to make decisions concerning the future direction of operations, and Rewards additional responsibilities assumed by his employees with salary raises.

19. H-L-H
    Manager #19 Critically analyzes reports containing statistical and numerical information, Develops milestones, due dates, and responsibilities for projects, plans, and activities to help employees progress in their work, and Has poor relationships with business associates.

20. L-H-H
    Manager #20 Frequently reviews and provides feedback concerning the accuracy and efficiency of subordinates, Relies on old guidelines in new situations regardless of their applicability, and Creates a favorable impression for the company with new employees.

21. L-L-H

Manager #21 Analyzes reasons for rejects in production, Is not interested in the industry's up-and-coming technology, and Aggravates issues for employees who file complaints/grievances.

22. H-L-L

Manager #22 Is slow to react to crisis or emergency, Stays informed about the latest technical developments in his/her professional area, and Provides little opportunity for even the most deserving employees to advance.

23. L-H-L

Manager #23 Is slow to react to crisis or emergency, Does not bother to learn about competitor's practices, Provides recognition, and encouragement, and constructive feedback regarding subordinate job performance.

24. L-L-L

Manager #24 Does not check on subordinates' productivity, Loses sight of business strategy in creating the work unit's plan, and Has poor relationships with business associates.

25. H-H-H

Manager #9B Evaluates the outcomes of internal improvement projects, Determines the strategic business plan of the work unit, and Motivates subordinates to improve performance through a process of goal setting and positive reinforcement.

26. H-H-L

Manager #10B Fails to monitor or enforce compliance with government/law regulations, Is involved in establishing profit objectives for the company, and Considers other people as his/her equal.

27. H-H-H

Manager #17B Takes necessary action to prevent and resolve alleged discriminatory practices, Plans the best use of available facilities, and Builds sense of pride by helping work groups define their purpose.

28. H-H-L

Manager #18B Disregards important customers who are dissatisfied, Is able to make decisions concerning the future direction of operations, and Rewards additional responsibilities assumed by his employees with salary raises.

Appendix B

Ideal Leader Prototype Scale

Please rate how descriptive each of the 31 traits presented are of **your ideal business leader** using the scale presented below.

1----------2----------3----------4----------5----------6--------7
Not at all descriptive   Extremely descriptive

1. Understanding	1-----2-----3-----4-----5-----6-----7
2. Hardworking	1-----2-----3-----4-----5-----6-----7
3. Warm	1-----2-----3-----4-----5-----6-----7
4. Clever	1-----2-----3-----4-----5-----6-----7
5. Masculine	1-----2-----3-----4-----5-----6-----7
6. Domineering	1-----2-----3-----4-----5-----6-----7
7. Charismatic	1-----2-----3-----4-----5-----6-----7
8. Motivated	1-----2-----3-----4-----5-----6-----7
9. Intelligent	1-----2-----3-----4-----5-----6-----7
10. Pushy	1-----2-----3-----4-----5-----6-----7
11. Loud	1-----2-----3-----4-----5-----6-----7
12. Sincere	1-----2-----3-----4-----5-----6-----7
13. Energetic	1-----2-----3-----4-----5-----6-----7
14. Dedicated	1-----2-----3-----4-----5-----6-----7
15. Manipulative	1-----2-----3-----4-----5-----6-----7
16. Male	1-----2-----3-----4-----5-----6-----7
17. Compassionate	1-----2-----3-----4-----5-----6-----7
18. Strong	1-----2-----3-----4-----5-----6-----7
19. Dynamic	1-----2-----3-----4-----5-----6-----7
20. Helpful	1-----2-----3-----4-----5-----6-----7
21. Dominant	1-----2-----3-----4-----5-----6-----7
22. Wise	1-----2-----3-----4-----5-----6-----7
23. Educated	1-----2-----3-----4-----5-----6-----7
24. Sensitive	1-----2-----3-----4-----5-----6-----7
25. Knowledgeable	1-----2-----3-----4-----5-----6-----7
26. Conceited	1-----2-----3-----4-----5-----6-----7
27. Bold	1-----2-----3-----4-----5-----6-----7
28. Sympathetic	1-----2-----3-----4-----5-----6-----7
29. Intellectual	1-----2-----3-----4-----5-----6-----7
30. Selfish	1-----2-----3-----4-----5-----6-----7
31. Forgiving	1-----2-----3-----4-----5-----6-----7

Appendix C

International Personality Item Pool (Self-Concept Measure)

How Accurately Can You Describe Yourself? Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence. Indicate for each statement whether it is how accurately it describes you using the rating scale below:

1----------2----------3----------4----------5
Very Inaccurate   Very Accurate

1. Am the life of the party.
2. Feel little concern for others.
3. Am always prepared.
4. Get stressed out easily.
5. Have a rich vocabulary.
6. Don't talk a lot.
7. Am interested in people.
8. Leave my belongings around.
9. Am relaxed most of the time.
10. Have difficulty understanding abstract ideas.
11. Feel comfortable around people.
12. Insult people.
13. Pay attention to details.
14. Worry about things.
15. Have a vivid imagination.
16. Keep in the background.
17. Sympathize with others' feelings.
18. Make a mess of things.
19. Seldom feel blue.
20. Am not interested in abstract ideas.
21. Start conversations.
22. Am not interested in other people's problems.
23. Get chores done right away.
24. Am easily disturbed.
25. Have excellent ideas.
26. Have little to say.
27. Have a soft heart.
28. Often forget to put things back in their proper place.
29. Get upset easily.
30. Do not have a good imagination.
31. Talk to a lot of different people at parties.
32. Am not really interested in others.

33. Like order.
34. Change my mood a lot.
35. Am quick to understand things.
36. Don't like to draw attention to myself.
37. Take time out for others.
38. Shirk my duties.
39. Have frequent mood swings.
40. Use difficult words.
41. Don't mind being the center of attention.
42. Feel others' emotions.
43. Follow a schedule.
44. Get irritated easily.
45. Spend time reflecting on things.
46. Am quiet around strangers.
47. Make people feel at ease.
48. Am exacting in my work.
49. Often feel blue.
50. Am full of ideas.

Appendix D

Leader Effectiveness Scale

Please rate your level of agreement with each of the statements using the scale presented below.

<center>1----------2----------3----------4----------5----------6--------7</center>
<center>Strongly Disagree   Strongly Agree</center>

1. This business manager is very effective as a leader.
   1-----2-----3-----4-----5-----6-----7

2. This business manager is a good leader.
   1-----2-----3-----4-----5-----6-----7

3. This business manager has good leadership qualities.
   1-----2-----3-----4-----5-----6-----7

4. This business manager behaves as a leader should.
   1-----2-----3-----4-----5-----6-----7

Appendix E

Hierarchical Generalized Linear Model Equations for Leader Categorization

Model 1: Unconditional

Level-1 Model: η_{ij} where η : logit of expected Leader Categorization for scenario i for subject j $= \beta_{0j} +$

r_{ij}

Sampling Model: $Y_{ij} \sim$ Bernoulli (π_{ij})

$$E\,(Y_{ij}) = \pi_{ij}\,,\ Var\,(Y_{ij}) = \pi_{ij}\,(1\text{-}\,\pi_{ij})$$

Link Function: $\eta_{ij} = \dfrac{\pi_{ij}}{1\text{-}\pi_{ij}}$

Level-2 Model: $\beta_{0ij} = \gamma_{00} + u_{0j}$, $\mu_{ij} \overset{i.i.d}{\sim} N\,(0,\tau_{00})$

Model 2: Baseline

Level-1 Model: η_{ij} where η : *logit Categorization$_{ij}$* $= \beta_{0j} + \beta_{1j}*(Planning_{1ij}) + \beta_{2j}*(Motivating_{2ij}) +$
$\qquad \beta_{3j}*(Controlling_{3ij}) + r_{ij}$

Level-2 Model: $\beta_{0ij} = \gamma_{00} + u_{0j}$

$\qquad \beta_{1ij} = \gamma_{10} + u_{1j}$

$\qquad \beta_{2ij} = \gamma_{20} + u_{2j}$

$\qquad \beta_{3ij} = \gamma_{30} + u_{3j}$

$\qquad \mu_{ij} \overset{i.i.d}{\sim} N\,(0,\tau_{00})$ where $T = \begin{pmatrix} \tau_{00} & \tau_{01} & \tau_{02} & \tau_{03} \\ & \tau_{11} & \tau_{12} & \tau_{13} \\ & & \tau_{22} & \tau_{23} \\ & & & \tau_{33} \end{pmatrix}$

$\begin{pmatrix} u_{0j} \\ u_{1j} \\ u_{2j} \\ u_{3j} \end{pmatrix}$

Model 3: Adjusted Baseline

Level-1 Model: η_{ij} where η : *logit Categorization$_{ij}$* $= \beta_{0j} + \beta_{1j}*(Planning_{1ij}) + \beta_{2j}*(Motivating_{2ij}) +$
$\qquad \beta_{3j}*(Controlling_{3ij}) + r_{ij}$

Level-2 Model: $\beta_{0ij} = \gamma_{00} + \gamma_{01}*(Order\ Effects\ Code1_i) + \gamma_{02}*(Order\ Effects\ Code2_i) + u_{0j}$

$\qquad \beta_{1ij} = \gamma_{10} + \gamma_{11}*(Order\ Effects\ Code1_i) + \gamma_{12}*(Order\ Effects\ Code2_i) + u_{1j}$

$\qquad \beta_{2ij} = \gamma_{20} + \gamma_{21}*(Order\ Effects\ Code1_i) + \gamma_{22}*(Order\ Effects\ Code2_i) + u_{2j}$

$\qquad \beta_{3ij} = \gamma_{30} + \gamma_{31}*(Order\ Effects\ Code1_i) + \gamma_{32}*(Order\ Effects\ Code2_i) + u_{3j}$

$\qquad \mu_{ij} \overset{i.i.d}{\sim} N\,(0,\tau_{00})$

Model 4: Test of Hypotheses 2 & 3

Level-1 Model: η_{ij} where η : $logit\ Categorization_{ij} = \beta_{0j} + \beta_{1j}*(Planning_{1ij}) + \beta_{2j}*(Motivating_{2ij}) + \beta_{3j}*(Controlling_{3ij}) + r_{ij}$

Level-2 Model: $\beta_{0ij} = \gamma_{00} + \gamma_{01}*(Order\ Effects\ Code1_i) + \gamma_{02}*(Order\ Effects\ Code2_i) +$

$\gamma_{03}*(Prototype\ Dummy\ Code1_i) + \gamma_{04}*(Prototype\ Dummy\ Code2_i) +$

$\gamma_{05}*(Prototype\ Dummy\ Code3_i) + u_{0j}$

$\beta_{1ij} = \gamma_{10} + \gamma_{11}*(Order\ Effects\ Code1_i) + \gamma_{12}*(Order\ Effects\ Code2_i)$

$+\gamma_{13}*(Prototype\ Dummy\ Code1_i) + \gamma_{14}*(Prototype\ Dummy\ Code3_i) +$

$\gamma_{15}*(Prototype\ Dummy\ Code3_i) + u_{1j}$

$\beta_{2ij} = \gamma_{20} + \gamma_{21}*(Order\ Effects\ Code1_i) + \gamma_{22}*(Order\ Effects\ Code2_i)$

$+\gamma_{23}*(Prototype\ Dummy\ Code1_i) + \gamma_{24}*(Prototype\ Dummy\ Code2_i) +$

$\gamma_{25}*(Prototype\ Dummy\ Code3_i) + u_{2j}$

$\beta_{3ij} = \gamma_{30} + \gamma_{31}*(Order\ Effects\ Code1_i) + \gamma_{32}*(Order\ Effects\ Code2_i)$

$+\gamma_{33}*(Prototype\ Dummy\ Code1_i) + \gamma_{34}*(Prototype\ Dummy\ Code2_i) +$

$\gamma_{35}*(Prototype\ Dummy\ Code3_i) + u_{3j}$

$\mu_{ij} \overset{i.i.d}{\underset{\sim}{}} N\ (0, \tau_{00})$

Model 5: Test of Hypotheses 4 & 5

Level-1 Model: η_{ij} where η : $logit\ Categorization_{ij} = \beta_{0j} + \beta_{1j}*(Planning_{1ij}) + \beta_{2j}*(Motivating_{2ij}) + \beta_{3j}*(Controlling_{3ij}) + r_{ij}$

Level-2 Model: $\beta_{0ij} = \gamma_{00} + \gamma_{01}*(Order\ Effects\ Code1_i) + \gamma_{02}*(Order\ Effects\ Code2_i) + \gamma_{03}*(Self\text{-}Concept\ Dummy\ Code1_i) + \gamma_{04}*(Self\text{-}Concept\ Dummy\ Code2_i) + u_{0j}$

$\beta_{1ij} = \gamma_{10} + \gamma_{11}*(Order\ Effects\ Code1_i) + \gamma_{12}*(Order\ Effects\ Code2_i) + \gamma_{13}*(Self\text{-}Concept\ Dummy\ Code1_i) + \gamma_{14}*(Self\text{-}Concept\ Dummy\ Code2_i) + u_{1j}$

$\beta_{2ij} = \gamma_{20} + \gamma_{21}*(Order\ Effects\ Code1_i) + \gamma_{22}*(Order\ Effects\ Code2_i) + \gamma_{23}*(Self\text{-}Concept\ Dummy\ Code1_i) + \gamma_{24}*(Self\text{-}Concept\ Dummy\ Code2_i) + u_{2j}$

$\beta_{3ij} = \gamma_{30} + \gamma_{31}*(Order\ Effects\ Code1_i) + \gamma_{32}*(Order\ Effects\ Code2_i) + \gamma_{33}*(Self\text{-}Concept\ Dummy\ Code1_i) + \gamma_{34}*(Self\text{-}Concept\ Dummy\ Code2_i) + u_{3j}$

$\mu_{ij} \overset{i.i.d}{\underset{\sim}{}} N\ (0, \tau_{00})$

Model 6: Test of Hypotheses 6 & 7

Level-1 Model: η_{ij} where η : $logit\ Categorization_{ij} = \beta_{0j} + \beta_{1j}*(Planning_{1ij}) + \beta_{2j}*(Motivating_{2ij}) + \beta_{3j}*(Controlling_{3ij}) + r_{ij}$

Level-2 Model: $\beta_{0ij} = \gamma_{00} + \gamma_{01}*(Order\ Effects\ Code1_i) + \gamma_{02}*(Order\ Effects\ Code2_i) +$

γ_{03}*(*Prototype Dummy Code1$_i$*) + γ_{04}*(*Prototype Dummy Code2$_i$*) +

γ_{05}*(*Prototype Dummy Code3$_i$*) + γ_{06}*(*Self-Concept Dummy Code1$_i$*) + γ_{07}*(*Self-Concept Dummy Code2$_i$*) + u_{0j}

$\beta_{1ij} = \gamma_{10} + \gamma_{11}$*(*Order Effects Code1$_i$*) + γ_{12}*(*Order Effects Code2$_i$*)

$+\gamma_{13}$*(*Prototype Dummy Code1$_i$*) + γ_{14}*(*Prototype Dummy Code3$_i$*) +

γ_{15}*(*Prototype Dummy Code3$_i$*) + γ_{16}*(*Self-Concept Dummy Code1$_i$*) + γ_{17}*(*Self-Concept Dummy Code2$_i$*) + u_{1j}

$\beta_{2ij} = \gamma_{20} + \gamma_{21}$*(*Order Effects Code1$_i$*) + γ_{22}*(*Order Effects Code2$_i$*)

$+\gamma_{23}$*(*Prototype Dummy Code1$_i$*) + γ_{24}*(*Prototype Dummy Code2$_i$*) +

γ_{25}*(*Prototype Dummy Code3$_i$*) + γ_{26}*(*Self-Concept Dummy Code1$_i$*) + γ_{27}*(*Self-Concept Dummy Code2$_i$*) + u_{2j}

$\beta_{3ij} = \gamma_{30} + \gamma_{31}$*(*Order Effects Code1$_i$*) + γ_{32}*(*Order Effects Code2$_i$*)

$+\gamma_{33}$*(*Prototype Dummy Code1$_i$*) + γ_{34}*(*Prototype Dummy Code2$_i$*) +

γ_{35}*(*Prototype Dummy Code3$_i$*) + γ_{36}*(*Self-Concept Dummy Code1$_i$*) + γ_{37}*(*Self-Concept Dummy Code2$_i$*) + u_{3j}

$\mu_{ij} \overset{i.i.d}{\sim} N(0, \tau_{00})$

Appendix F

Hierarchical Linear Model Equations for Leader Effectiveness

Model 1: Unconditional

Level-1 Model: η_{ij} where η : Effectiveness for scenario i for subject j $_{ij} = \beta_{0j} + r_{ij}$, $r_{ij} \overset{i.i.d}{\sim} N(0, \sigma^2)$

Level-2 Model: $\beta_{0ij} = \gamma_{00} + u_{0j}$, $\mu_{ij} \overset{i.i.d}{\sim} N(0, \tau_{00})$, $r_{ij} \overset{i.i.d}{\sim} N(0, r^2)$

Model 2: Baseline

Level-1 Model: η_{ij} where η : $Effectiveness_{ij} = \beta_{0j} + \beta_{1j}*(Planning_{1ij}) + \beta_{2j}*(Motivating_{2ij}) + \beta_{3j}*(Controlling_{3ij}) + r_{ij}$

Level-2 Model: $\beta_{0ij} = \gamma_{00} + u_{0j}$

$\beta_{1ij} = \gamma_{10} + u_{1j}$

$\beta_{2ij} = \gamma_{20} + u_{2j}$

$\beta_{3ij} = \gamma_{30} + u_{3j}$

$\mu_{ij} \overset{i.i.d}{\sim} N(0, \tau_{00})$ where $T = \begin{pmatrix} \tau_{00} & \tau_{01} & \tau_{02} & \tau_{03} \\ & \tau_{11} & \tau_{12} & \tau_{13} \\ & & \tau_{22} & \tau_{23} \\ & & & \tau_{33} \end{pmatrix}$

$\begin{pmatrix} u_{0j} \\ u_{1j} \\ u_{2j} \\ u_{3j} \end{pmatrix}$

Model 3: Adjusted Baseline

Level-1 Model: η_{ij} where η : $Effectiveness_{ij} = \beta_{0j} + \beta_{1j}*(Planning_{1ij}) + \beta_{2j}*(Motivating_{2ij}) + \beta_{3j}*(Controlling_{3ij}) + r_{ij}$

Level-2 Model: $\beta_{0ij} = \gamma_{00} + \gamma_{01}*(Order\ Effects\ Code1_i) + \gamma_{02}*(Order\ Effects\ Code2_i) + u_{0j}$

$\beta_{1ij} = \gamma_{10} + \gamma_{11}*(Order\ Effects\ Code1_i) + \gamma_{12}*(Order\ Effects\ Code2_i) + u_{1j}$

$\beta_{2ij} = \gamma_{20} + \gamma_{21}*(Order\ Effects\ Code1_i) + \gamma_{22}*(Order\ Effects\ Code2_i) + u_{2j}$

$\beta_{3ij} = \gamma_{30} + \gamma_{31}*(Order\ Effects\ Code1_i) + \gamma_{32}*(Order\ Effects\ Code2_i) + u_{3j}$

$\mu_{ij} \overset{i.i.d}{\sim} N(0, \tau_{00})$

Model 4: Test of Hypotheses 2 & 3

Level-1 Model: η_{ij} where η : $Effectiveness_{ij} = \beta_{0j} + \beta_{1j}*(Planning_{1ij}) + \beta_{2j}*(Motivating_{2ij}) + \beta_{3j}*(Controlling_{3ij}) + r_{ij}$

Level-2 Model: $\beta_{0ij} = \gamma_{00} + \gamma_{01}*(Order\ Effects\ Code1_i) + \gamma_{02}*(Order\ Effects\ Code2_i) + \gamma_{03}*(Prototype\ Dummy\ Code1_i) + \gamma_{04}*(Prototype\ Dummy\ Code2_i) +$

$\gamma_{05}*(Prototype\ Dummy\ Code3_i) + u_{0j}$

$\beta_{1ij} = \gamma_{10} + \gamma_{11}*(Order\ Effects\ Code1_i) + \gamma_{12}*(Order\ Effects\ Code2_i)$

$+\gamma_{13}*(Prototype\ Dummy\ Code1_i) + \gamma_{14}*(Prototype\ Dummy\ Code3_i) +$

$\gamma_{15}*(Prototype\ Dummy\ Code3_i) + u_{1j}$

$\beta_{2ij} = \gamma_{20} + \gamma_{21}*(Order\ Effects\ Code1_i) + \gamma_{22}*(Order\ Effects\ Code2_i)$

$+\gamma_{23}*(Prototype\ Dummy\ Code1_i) + \gamma_{24}*(Prototype\ Dummy\ Code2_i) +$

$\gamma_{25}*(Prototype\ Dummy\ Code3_i) + u_{2j}$

$\beta_{3ij} = \gamma_{30} + \gamma_{31}*(Order\ Effects\ Code1_i) + \gamma_{32}*(Order\ Effects\ Code2_i)$

$+\gamma_{33}*(Prototype\ Dummy\ Code1_i) + \gamma_{34}*(Prototype\ Dummy\ Code2_i) +$

$\gamma_{35}*(Prototype\ Dummy\ Code3_i) + u_{3j}$

$\mu_{ij} \overset{i.i.d}{\underset{\sim}{}} N(0, \tau_{00})$

Model 5: Test of Hypotheses 4 & 5

Level-1 Model: η_{ij} where $\eta : Effectiveness_{ij} = \beta_{0j} + \beta_{1j}*(Planning_{1ij}) + \beta_{2j}*(Motivating_{2ij}) +$

$\beta_{3j}*(Controlling_{3ij}) + r_{ij}$

Level-2 Model: $\beta_{0ij} = \gamma_{00} + \gamma_{01}*(Order\ Effects\ Code1_i) + \gamma_{02}*(Order\ Effects\ Code2_i) + \gamma_{03}*(Self\text{-}Concept\ Dummy\ Code1_i) + \gamma_{04}*(Self\text{-}Concept\ Dummy\ Code2_i) + u_{0j}$

$\beta_{1ij} = \gamma_{10} + \gamma_{11}*(Order\ Effects\ Code1_i) + \gamma_{12}*(Order\ Effects\ Code2_i) + \gamma_{13}*(Self\text{-}Concept\ Dummy\ Code1_i) + \gamma_{14}*(Self\text{-}Concept\ Dummy\ Code2_i) + u_{1j}$

$\beta_{2ij} = \gamma_{20} + \gamma_{21}*(Order\ Effects\ Code1_i) + \gamma_{22}*(Order\ Effects\ Code2_i) + \gamma_{23}*(Self\text{-}Concept\ Dummy\ Code1_i) + \gamma_{24}*(Self\text{-}Concept\ Dummy\ Code2_i) + u_{2j}$

$\beta_{3ij} = \gamma_{30} + \gamma_{31}*(Order\ Effects\ Code1_i) + \gamma_{32}*(Order\ Effects\ Code2_i) + \gamma_{33}*(Self\text{-}Concept\ Dummy\ Code1_i) + \gamma_{34}*(Self\text{-}Concept\ Dummy\ Code2_i) + u_{3j}$

$\mu_{ij} \overset{i.i.d}{\underset{\sim}{}} N(0, \tau_{00})$

Model 6: Test of Hypotheses 6 & 7

Level-1 Model: η_{ij} where $\eta : Effectiveness_{ij} = \beta_{0j} + \beta_{1j}*(Planning_{1ij}) + \beta_{2j}*(Motivating_{2ij}) +$

$\beta_{3j}*(Controlling_{3ij}) + r_{ij}$

Level-2 Model: $\beta_{0ij} = \gamma_{00} + \gamma_{01}*(Order\ Effects\ Code1_i) + \gamma_{02}*(Order\ Effects\ Code2_i) +$

$\gamma_{03}*(Prototype\ Dummy\ Code1_i) + \gamma_{04}*(Prototype\ Dummy\ Code2_i) +$

$\gamma_{05}*(Prototype\ Dummy\ Code3_i) + \gamma_{06}*(Self\text{-}Concept\ Dummy\ Code1_i) + \gamma_{07}*(Self\text{-}Concept\ Dummy\ Code2_i) + u_{0j}$

$\beta_{1ij} = \gamma_{10} + \gamma_{11}*(Order\ Effects\ Code1_i) + \gamma_{12}*(Order\ Effects\ Code2_i)$

$+\gamma_{13}*(Prototype\ Dummy\ Code1_i) + \gamma_{14}*(Prototype\ Dummy\ Code3_i) +$

$\gamma_{15}*(Prototype\ Dummy\ Code3_i) + \gamma_{16}*(Self\text{-}Concept\ Dummy\ Code1_i) + \gamma_{17}*(Self\text{-}$

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Concept Dummy Code2$_i$) + u$_{1j}$

$\beta_{2ij} = \gamma_{20} + \gamma_{21}$*(*Order Effects Code1$_i$*) + γ_{22}*(*Order Effects Code2$_i$*)

+γ_{23}*(*Prototype Dummy Code1$_i$*) + γ_{24}*(*Prototype Dummy Code2$_i$*) +

γ_{25}*(*Prototype Dummy Code3$_i$*) + γ_{26}*(*Self-Concept Dummy Code1$_i$*) + γ_{27}*(*Self-Concept Dummy Code2$_i$*) + u$_{2j}$*

$\beta_{3ij} = \gamma_{30} + \gamma_{31}$*(*Order Effects Code1$_i$*) + γ_{32}*(*Order Effects Code2$_i$*)

+γ_{33}*(*Prototype Dummy Code1$_i$*) + γ_{34}*(*Prototype Dummy Code2$_i$*) +

γ_{35}*(*Prototype Dummy Code3$_i$*) + γ_{36}*(*Self-Concept Dummy Code1$_i$*) + γ_{37}*(*Self-Concept Dummy Code2$_i$*) + u$_{3j}$*

$\mu_{ij} \overset{i.i.d}{\sim} N(0, \tau_{00})$

Table 1.

Descriptive Statistics for Managerial Performance Dimension with All Behaviors Included

	Effective Behaviors				Ineffective Behaviors			
	Mean	Range	SD	Number of Behaviors	Mean	Range	SD	Number of Behaviors
Planning	5.96	6.37 - 5.58	0.19	19	2.19	3.32 - 1.50	0.62	7
Motivating	5.92	6.23 - 5.16	0.30	18	2.01	2.82 - 1.65	0.43	7
Controlling	5.85	6.38 - 5.11	0.27	20	2.07	2.58 - 1.67	0.30	7

Table 2.

Descriptive Statistics for Managerial Performance Dimensions with Reduced Set of Behaviors

	Effective Behaviors					Ineffective Behaviors			
	Mean	Range	SD	Total		Mean	Range	SD	Total
Planning	6.02	6.26 - 5.85	0.11	12		2.10	2.44 - 1.61	0.35	5
Motivating	6.07	6.23 - 5.86	0.12	12		1.92	2.33 - 1.65	0.27	5
Controlling	5.97	6.23 - 5.80	0.12	12		2.05	2.58 - 1.67	0.33	6

Table 3.
Agreement and Descriptive Statistics for Selected Managerial Performance
Behaviors

Effective Planning Behaviors

	Mean	$R_{wg(1)}$	N_{rwg}	% Agree	N_{PA}	Times Used
Evaluates the costs and benefits of alternative solutions to problems before making decisions	6.26	0.83	40	0.71	17	1
Considers legal and ethical constraints when making decisions regarding employees or customers	6.09	0.70	44	0.65	20	1
Prepares plans to ensure adequate supply of materials	6.09	0.80	39	0.87	23	1
Prepares contracts with great attention to detail	6.08	0.76	40	0.65	20	1
Determines the strategic business plan of the work unit	6.06	0.94	34	0.77	22	1
Plans the best use of available facilities	6.00	0.84	35	0.72	25	1
Processes and evaluates a variety of information before making a decision that significantly affect employees or customers	6.00	0.77	33	0.67	15	1
Stays informed about the latest technical developments in his/her professional area	6.00	0.77	36	0.67	21	1
Identifies new markets for company products or services	5.97	0.89	40	0.80	25	1
Is able to make decisions concerning the future direction of operations	5.92	0.72	41	0.71	17	1
Develops milestones, due dates, and responsibilities for projects, plans, and activities to help employees progress in their work	5.91	0.81	35	0.67	21	1
Is involved in establishing profit objectives for the company	5.85	0.86	38	0.77	26	1

Ineffective Planning Behaviors

	Mean	$R_{wg(1)}$	N_{rwg}	% Agree	N_{PA}	Times Used
Hesitates to make decisions concerning the future direction of operations when required	2.44	0.71	36	0.69	16	2
Relies on old guidelines in new situations regardless of their applicability	2.43	0.70	29	0.67	15	2
Is not interested in the industry's up-and-coming technology-Group	2.03	0.75	34	0.67	18	3
Loses sight of business strategy in creating the work unit's plan	1.98	0.72	48	0.65	20	3
Does not bother to learn about competitor's practices	1.61	0.78	33	0.65	17	2

Agreement and Descriptive Statistics for Selected Managerial Performance Behaviors (continued)

Effective Motivating Behaviors

	Mean	$R_{wg(1)}$	N_{rwg}	% Agree	N % Agree	Times Used
Motivates subordinates to improve performance through a process of goal setting and positive reinforcement	6.23	0.80	35	0.76	29	1
Is proud to tell people that he works for the company	6.21	0.85	36	0.78	23	1
Presents awards to deserving employees	6.20	0.79	36	0.76	29	1
Provides recognition, encouragement, and constructive feedback regarding subordinate job performance	6.15	0.75	38	0.68	19	1
Starts the day on time in order to set a good example and check on the tardiness of his people	6.12	0.76	38	0.68	22	1
Builds sense of pride by helping work groups define their purpose	6.11	0.77	43	0.73	26	1
Launches programs to build morale in the company	6.08	0.74	41	0.67	24	1
Creates a favorable impression for the company with new employees	6.03	0.85	37	0.67	24	1
Rewards additional responsibilities assumed by his employees with salary raises	6.00	0.82	39	0.67	24	1
Maintains good relationships with his/her business associates	5.97	0.77	34	0.72	18	1
Considers other people as his/her equal	5.86	0.72	46	0.67	18	1
Counsels subordinates about their professional development	5.86	0.79	39	0.67	24	1

Ineffective Motivating Behaviors

	Mean	$R_{wg(1)}$	N_{rwg}	% Agree	N % Agree	Times Used
Aggravates issues for employees who file complaints/grievances	2.33	0.72	43	0.67	18	2
Provides no performance goals to motivate subordinates	2.02	0.70	44	0.71	21	2
Misrepresents group accomplishments as personal accomplishments in work reports	1.86	0.70	44	0.67	18	2
Has poor relationships with his/her business associates	1.74	0.72	46	0.67	24	3
Provides little opportunity for even the most deserving employees to advance	1.65	0.85	39	0.68	25	3

Agreement and Descriptive Statistics for Selected Managerial Performance Behaviors (continued)

Effective Controlling Behaviors

	Mean	$R_{wg(1)}$	N_{rwg}	% Agree	N % Agree	Times Used
Monitors compliance with government laws/regulations and implement corrective action	6.23	0.73	37	0.67	21	1
Frequently reviews and provides feedback concerning the accuracy and efficiency of subordinates	6.07	0.86	33	0.71	24	1
Analyzes the effectiveness of operations	6.06	0.78	37	0.78	23	1
Controls quality of products and services	6.00	0.85	36	0.67	27	1
Conducts formal performance appraisals with subordinates	6.00	0.85	35	0.67	15	1
Analyzes operations to discover inefficient use of equipment	6.00	0.76	35	0.70	23	1
Evaluates the outcomes of internal improvement projects	5.97	0.85	40	0.65	16	1
Takes necessary action to prevent and resolve alleged discriminatory practices	5.94	0.70	49	0.65	17	1
Investigates and settles employee grievances/complaints	5.89	0.77	31	0.65	20	1
Implements standardized review processes for quality control	5.86	0.74	40	0.67	15	1
Analyzes reasons for rejects in production	5.85	0.71	41	0.68	22	1
Critically analyzes reports containing statistical and numerical information	5.80	0.73	45	0.65	18	1

Ineffective Controlling Behaviors

	Mean	$R_{wg(1)}$	N_{rwg}	% Agree	N % Agree	Times Used
Does not check on subordinates' productivity	2.58	0.72	45	0.67	18	2
Conducts inadequate assessments of internal improvement projects	2.19	0.74	48	0.67	12	2
Fails to monitor or enforce compliance with government/law regulations	2.16	0.70	46	0.65	20	2
Disregards important customers who are dissatisfied	1.91	0.70	46	0.67	24	2
Ignores complaints/questions from customers	1.80	0.70	49	0.67	15	2
Is slow to react to crisis or emergency	1.67	0.80	33	0.65	20	2

Table 4

Descriptive Statistics and Bivariate Correlations for Level-1 and Leve1-2 Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9
Level 1											
1. Leader Categorization	.43	.49									
2. Leader Effectiveness	3.54	1.66	.75**								
Level 2											
1. Self: Conscientiousness	4.87	.72									
2. Self: Extraversion	4.57	.97	.12*								
3. Self: Agreeableness	5.05	.70	.39*	.23**							
4. Self: Emotional Stability	4.39	.93	.19**	.25**	.26**						
5. Ideal Leader: Sensitivity	5.79	.85	.30**	.10	.40**	.18**					
6. Ideal Leader: Intelligence	6.26	.79	.31**	.18**	.33**	.13*	.62**				
7. Ideal Leader: Dedication	5.85	.81	.38**	.16**	.43**	.16**	.63**	.70**			
8. Ideal Leader: Tyranny	2.91	1.11	-.34**	.08	-.32**	-.23**	-.29**	-.15**	-.33**		

Note. N= 318 subjects. n= 7632 observations. *p <.05. p<.01. Point bi-serial correlation reported for Leader Categorization.

Table 5

Cluster Analysis Results for Ideal Leader Prototype Factor Scores

	Grand Mean	Cluster			
		1 Anti-Prototypic	2 Laissez-Faire	3 Autocratic	4 Prototypic
Cluster Membership	318	68	105	31	114
Factor					
Sensitivity	5.79	4.25	5.56	5.67	6.49
Intelligence	5.86	4.60	6.10	6.27	6.85
Dedication	6.26	4.45	5.49	5.96	6.51
Tyranny	2.91	3.85	2.36	4.29	2.35

Table 6

Multivariate Tests for Between-Groups Differences on Ideal Leader Prototype Traits

Trait	Anti-Prototypic (n=68)		Laissez-Faire (n=105)		Autocratic (n=31)		Prototypic (n=114)		Mean Square	Mean Square Error	F	η^2
	Mean	SD	Mean	SD	Mean	SD	Mean	SD				
Sensitivity	4.25^a	.67	5.56^b	.49	5.67^b	.69	6.49^c	.44	45.66	.30	154.74**	.60
Dedication	4.60^a	.55	6.10^b	.57	6.27^b	.57	6.85^c	.26	42.27	.23	181.84**	.64
Intelligence	4.45^a	.69	5.49^b	.53	5.96^c	.51	6.51^d	.46	41.61	.27	155.23**	.60
Tyranny	3.85^a	.95	2.36^b	.73	4.29^c	.73	2.35^b	.73	75.05	.52	145.17**	.58

Note. N=318. *p<.05. **p<.01. Means that do not share subscripts differ by p < .05 according to Tamhane's T2 for unequal variances and sample sizes.

Table 7

Cluster Analysis Results for Self-Concept Factor Scores

| | | Cluster | | |
	Grand Mean	1 Under-Controlled	2 Resilient	3 Over-Controlled
Cluster Membership	318	126	134	58
Factor				
Extraversion	4.57	4.42	5.27	3.23
Agreeableness	5.05	4.66	5.39	5.15
Conscientiousness	4.87	4.46	5.19	5.07
Emotional Stability	4.39	3.65	5.00	4.57

Table 8

Multivariate Tests for Between-Groups Differences on Self-Concept Traits

Trait	Under-Controlled (n=126)		Resilient (n=134)		Over-Controlled (n=158)		Mean Square	Mean Square Error	F	η^2
	Mean	SD	Mean	SD	Mean	SD				
Extraversion	4.24[a]	.65	5.27[b]	.60	3.24[c]	.65	85.86	.40	217.44**	.58
Agreeableness	4.66[a]	.67	5.39[b]	.57	5.14[c]	.64	17.80	.39	46.13**	.23
Conscientiousness	4.46[a]	.66	5.19[b]	.57	5.05[c]	.70	18.61	.40	46.96**	.23
Emotional Stability	3.65[a]	.58	5.00[b]	.70	4.57[c]	.88	60.36	.48	125.93**	.44

Note. N=318. *p<.05. **p<.01. Means that do not share subscripts differ by p < .05 according to Tamhane's T2 for unequal variances and sample sizes.

Table 9

Contingency Table for Self-Concept and Ideal Leader Prototype Patterns

Self-Concept Patterns		Ideal Leader Prototype Patterns				
		Anti-Prototypic	Laissez-Faire	Autocratic	Prototypic	Total
Under-Controlled	Observed Count	28 (22.2%)	31 (24.6%)	37 (29.4%)	30 (23.8%)	
	Expected Count	12.3	41.6	26.9	45.2	100% (126)
	Standardized Residuals	4.5**	-1.6	1.9	-2.3*	
Resilient	Observed Count	1 (0.7%)	49 (36.6%)	27 (20.1%)	57 (42.5%)	
	Expected Count	13.1	44.2	28.7	48.0	100% (134)
	Standardized Residuals	-3.3**	.7	-.3	1.3	
Over-Controlled	Observed Count	2 (3.4%)	25 (43.1%)	4 (6.9%)	27 (46.6%)	
	Expected Count	5.7	19.2	12.4	20.8	100% (58)
	Standardized Residuals	-3.7**	5.8**	-8.4**	6.2**	
Total		31 (9.7%)	105 (33%)	68 (21.4%)	114 (35.8%)	318
χ^2	56.78**					
Df	6					
Cramer's V	.30**					

Note. *p < .05. **p < .01.

Table 10

Unconditional and Baseline Hierarchical Generalized Linear Models for Leader Categorization

Fixed Effects	Model 1 Unconditional			Model 2 Baseline			Model 3 Adjusted Baseline		
	B	SE	Odds Ratio	B	SE	Odds Ratio	B	SE	Odds Ratio
Intercept1, π_0									
Intercept2, b_{00}	-.39**	.03	.75	-.65**	.06	.52	-.66**	.06	.52
Order Effects Codes									
M-C-P: P-M-C							-.12	.15	.89
C-P-M: P-M-C							-.26	.15	.77
Planning slope, π_1									
Intercept2, b_{10}				1.08*	.04	2.93	1.08**	.04	2.95
Order Effects Codes									
M-C-P: P-M-C							-.04	.11	.96
C-P-M: P-M-C							.14	.11	1.15
Motivating slope, π_2									
Intercept2, b_{20}				1.41*	.05	4.09	1.42**	.05	4.14
Order Effects Codes									
M-C-P: P-M-C							.39†	.11	1.47
C-P-M: P-M-C							.26*	.12	1.30
Controlling slope, π_3									
Intercept2, b_{30}				1.28*	.05	3.59	1.29**	.05	3.63
Order Effects Codes									
M-C-P: P-M-C							.19	.12	1.21
C-P-M: P-M-C							.53**	.13	1.70

Random Effects

Df	317			317			315		

Variance-Covariance Components (T_π)	.17**			.88**	-.43	-.54	-.70	.90**	-.42	-.55	-.70
				-.19	.22**	.71	.84	-.19	.22**	.74	.85
				-.28	.18	.30**	.86	-.28	.19	.28**	.89
				-.42	.26	.31	.43**	-.41	.25	.30	.39**

Note. N= 318 subjects. n= 7632 observations. *p <.05. **p<.01. Unit specific coefficients are reported. Upper triangles contain the correlations.

Table 11

Unconditional and Baseline Hierarchical Linear Models for Leader Effectiveness

| | Model 1 | | Model 2 | | Model 3 | |
	Unconditional		*Baseline*		*Adjusted Baseline*	
Fixed Effects	B	SE	B	SE	B	SE
Intercept1, π_0						
Intercept2, b_{00}	3.54**	.02	3.54**	.02	3.54**	.02
Order Effects Codes						
M-C-P: P-M-C					.04	.05
C-P-M: P-M-C					-.11	.06
Planning slope, π_1						
Intercept2, b_{10}			.57**	.02	.57**	.02
Order Effects Codes						
M-C-P: P-M-C					-.10**	.04
C-P-M: P-M-C					-.01	.04
Motivating slope, π_2						
Intercept2, b_{20}			.78**	.02	.78**	.02
Order Effects Codes						
M-C-P: P-M-C					.22**	.05
C-P-M: P-M-C					.03	.04
Controlling slope, π_3						
Intercept2, b_{30}			.74**	.02	.74**	.02
Order Effects Codes						
M-C-P: P-M-C					.05	.05
C-P-M: P-M-C					.18**	.05

Random Effects									
σ^2	2.70			.94			.94		
Df	317			315			315		
Variance-Covariance Components (T_π)	.06**		.13**	-.32	-.09	-.50	.13**	-.32	-.14	-.49
			-.02	.04**	.34	.79	-.02	.04**	.45	.83
			-.01	.02	.08**	.61	-.01	.02	.07**	.69
			-.05	.04	.05	.07**	-.05	.04	.05	.07**

Note. N= 318 subjects. n= 7632 observations. *p <.05. **p<.01. Unit specific coefficients are reported. Upper triangles contain the correlations.

Table 12
Level-2 Hierarchical Generalized Linear Models for Leader Categorization

Fixed Effects	Model 4 Test of Hypothesis 1			Model 5 Test of Hypothesis 2			Model 6 Test of Hypothesis 3		
	B	SE	Odds Ratio	B	SE	Odds Ratio	B	SE	Odds Ratio
Intercept1, π_0									
Intercept2, b_{00}	-.81**	.12	.44	-.84**	.10	.43	-.92**	.14	.40
Order Effects Codes									
M-C-P: P-M-C	-.09	.15	.91	-.08	.15	.92	-.06	.15	.94
C-P-M: P-M-C	-.21	.15	.81	-.26	.15	.77	-.21	.15	.81
Prototype Dummy Codes									
Anti-Prototypic: Prototypic	.64**	.18	1.90				.59**	.21	1.80
Laissez Faire: Prototypic	.09	.17	1.10				.08	.16	1.08
Autocratic: Prototypic	.23	.16	1.25				.23	.17	1.26
Self-Concept Dummy Codes									
Under-Controlled: Resilient				.33**	.14	1.39	.16	.15	1.18
Over-Controlled: Resilient				.29	.19	1.34	.31	.20	1.36
Planning slope, π_1									
Intercept2, b_{10}	1.32**	.07	3.74	1.18**	.07	3.26	1.32**	.08	3.74
Order Effects Codes									
M-C-P: P-M-C	-.06	.10	.94	-.04	.11	.96	-.05	.10	.95
C-P-M: P-M-C	.07	.10	1.07	.14	.11	1.15	.08	.10	1.08
Prototype Dummy Codes									
Anti-Prototypic: Prototypic	-.83**	.15	.43				-.77**	.16	.46
Laissez Faire: Prototypic	-.22*	.10	.81				-.21*	.10	.81
Autocratic: Prototypic	-.33†	.12	.72				-.29*	.12	.74
Self-Concept Dummy Codes									
Under-Controlled: Resilient				-.27**	.10	.76	-.07	.10	.93
Over-Controlled: Resilient				.09	.11	1.09	.08	.12	1.08
Motivating slope, π_2									
Intercept2, b_{20}	1.55**	.08	4.70	1.53**	.07	4.63	1.59**	.09	4.91
Order Effects Codes									
M-C-P: P-M-C	.37**	.12	1.44	.38	.12	1.45	.36**	.12	1.43
C-P-M: P-M-C	.22	.12	1.25	.26**	.12	1.30	.22	.12	1.25
Prototype Dummy Codes									
Anti-Prototypic: Prototypic	-.55**	.16	.57				-.50**	.18	.61
Laissez Faire: Prototypic	-.06	.12	.94				-.05	.12	.95
Autocratic: Prototypic	-.18	.13	.83				-.17	.13	.61
Self-Concept Dummy Codes									
Under-Controlled: Resilient				-.24*	.10	.78	-.10	.11	.91
Over-Controlled: Resilient				-.05	.13	.94	-.07	.14	.93
Controlling slope, π_3									
Intercept2, b_{30}	1.45**	.09	4.27	1.42**	.08	4.12	-1.50**	.10	4.48
Order Effects Codes									
M-C-P: P-M-C	.17	.12	1.19	.18	.12	1.20	.16	.12	1.18
C-P-M: P-M-C	.48**	.13	1.62	.53**	.13	1.70	.49†	.13	1.62
Prototype Dummy Codes									
Anti-Prototypic: Prototypic	-.64**	.16	.53				-.57**	.19	.57
Laissez-Faire: Prototypic	-.10	.13	.90				-.09	.13	.91
Autocratic: Prototypic	-.25	.14	.78				-.23	.14	.80
Self-Concept Dummy Codes									
Under-Controlled: Resilient				-.28*	.11	.75	-.13	.13	.88
Over-Controlled: Resilient				-.04	.14	.96	-.06	.15	.94

Random Effects

	Model 4				Model 5				Model 6			
Df	312				313				310			
Variance-Covariance Components (T_π)	.91**	-.39	-.53	-.69	.90**	-.42	-.54	-.70	.91**	-.40	-.52	-.69
	-.15	.17**	.71	.84	-.18	.21**	.73	.84	-.16	.17**	.70	.84
	-.26	.15	.27**	.87	-.27	.17	.28**	.88	-.26	.15	.27**	.87
	-.40	.21	.27	.37**	-.41	.24	.28	.38**	-.40	.21	.27	.37**

Note. N= 318 subjects. n= 7632 observations. *p <.05. **p<.01. Unit specific coefficients are reported. Upper triangles contain the correlations.

Table 13
Level-2 Hierarchical Linear Models for Leader Effectiveness

Fixed Effects	Model 4 Test of Hypothesis 4		Model 5 Test of Hypothesis 5		Model 6 Test of Hypothesis 6	
	B	SE	B	SE	B	SE
Intercept1, π_0						
Intercept2, b_{00}	3.45**	.04	3.49**	.04	3.43**	.04
Order Effects Codes						
M-C-P: P-M-C	.05	.05	.05	.05	.06	.05
C-P-M: P-M-C	-.08	.06	-.10	.06	-.08	.06
Prototype Dummy Codes						
Anti-Prototypic: Prototypic	.33**	.08			.30**	.09
Laissez Faire: Prototypic	.08	.05			.08	.05
Autocratic: Prototypic	.16*	.06			.15*	.06
Self-Concept Dummy Codes						
Under-Controlled: Resilient			.13*	.05	.06	.05
Over-Controlled: Resilient			.03	.06	.03	.06
Planning slope, π_1						
Intercept2, b_{10}	.67**	.02	.64**	.02	.70**	.03
Order Effects Codes						
M-C-P: P-M-C	-.11**	.04	-.11**	.04	-.12**	.04
C-P-M: P-M-C	-.04	.04	-.01	.04	-.04	.04
Prototype Dummy Codes						
Anti-Prototypic: Prototypic	-.36**	.07			-.31**	.07
Laissez-Faire: Prototypic	-.10**	.03			-.10**	.03
Autocratic: Prototypic	-.16**	.04			-.13**	.04
Self-Concept Dummy Codes						
Under-Controlled: Resilient			-.15**	.03	-.09*	.03
Over-Controlled: Resilient			-.02	.04	-.02	.04
Motivating slope, π_2						
Intercept2, b_{20}	.85**	.02	.85**	.02	.87**	.03
Order Effects Codes						
M-C-P: P-M-C	.21**	.05	.21**	.05	.20**	.05
C-P-M: P-M-C	.01	.04	.03	.04	.01	.04
Prototype Dummy Codes						
Anti-Prototypic: Prototypic	-.36**	.09			-.30**	.09
Laissez-Faire: Prototypic	-.04	.04			-.04	.04
Autocratic: Prototypic	-.07	.05			-.05	.05
Self-Concept Dummy Codes						
Under-Controlled: Resilient			-.15**	.04	-.09*	.04
Over-Controlled: Resilient			-.02	.04	-.01	.04
Controlling slope, π_3						
Intercept2, b_{30}	.82**	.02	.81**	.02	.85**	.03
Order Effects Codes						
M-C-P: P-M-C	.04	.04	.04	.05	.03	.04
C-P-M: P-M-C	.15	.05	.17**	.05	.15**	.04
Prototype Dummy Codes						
Anti-Prototypic: Prototypic	-.39**	.08			-.33**	.08
Laissez-Faire: Prototypic	-.07	.04			-.07	.04
Autocratic: Prototypic	-.08	.05			-.06	.05
Self-Concept Dummy Codes						
Under-Controlled: Resilient			-.16**	.04	-.09*	.04
Over-Controlled: Resilient			-.02	.04	-.02	.04

Random Effects

	Model 4				Model 5				Model 6			
σ^2	.94				.94				.94			
Df	312				313				310			
Variance-Covariance Components (T_π)	.12**	-.21	-.05	.43	.13**	-.28	-.10	-.46	.12**	-.20	-.04	-.43
	-.01	.03**	.34	.79	-.02	.04**	.39	.81	-.01	.03**	.32	.78
	-.00	.01	.06**	.62	-.01	.02	.06**	.66	-.01	.01	.06**	.61
	-.04	.03	.04	.06**	-.04	.04	.04	.06**	-.04	.03	.04	.06**

Note. N= 318 subjects. n= 7632 observations. *p <.05. **p<.01. Unit specific coefficients are reported. Upper triangles contain the correlations.
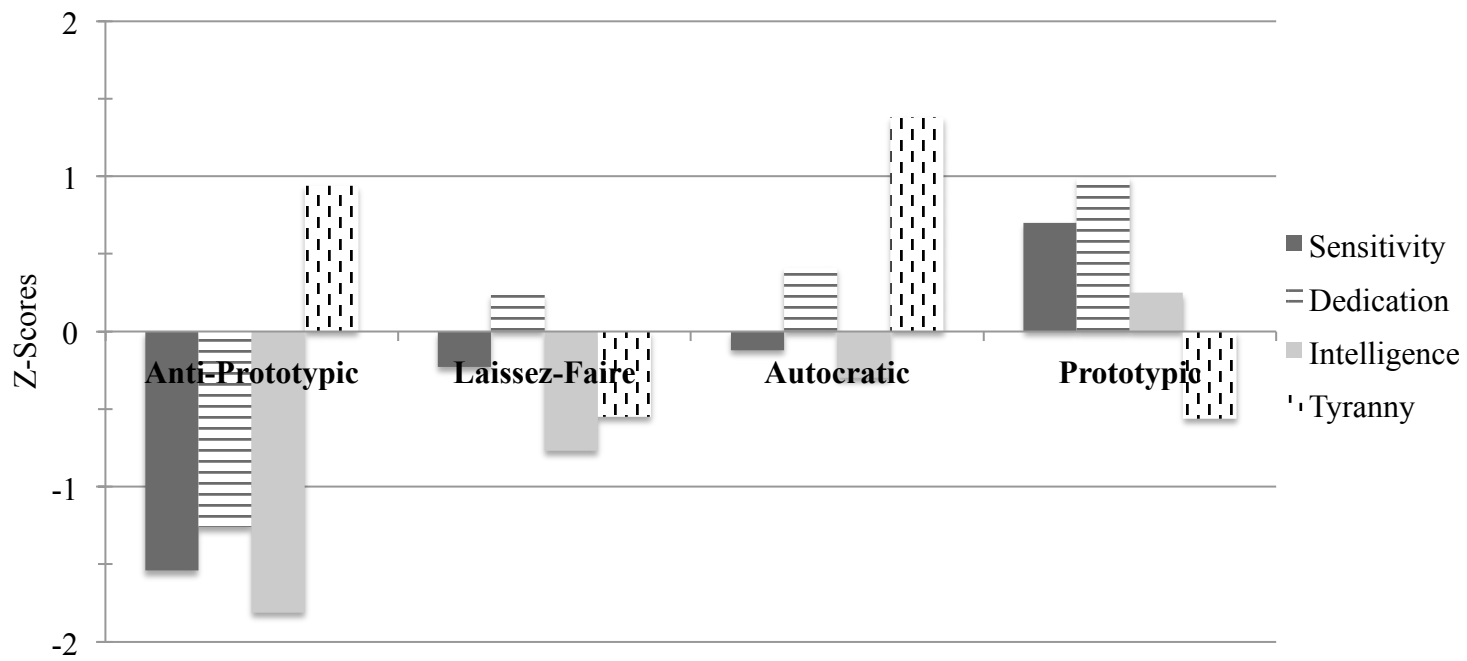
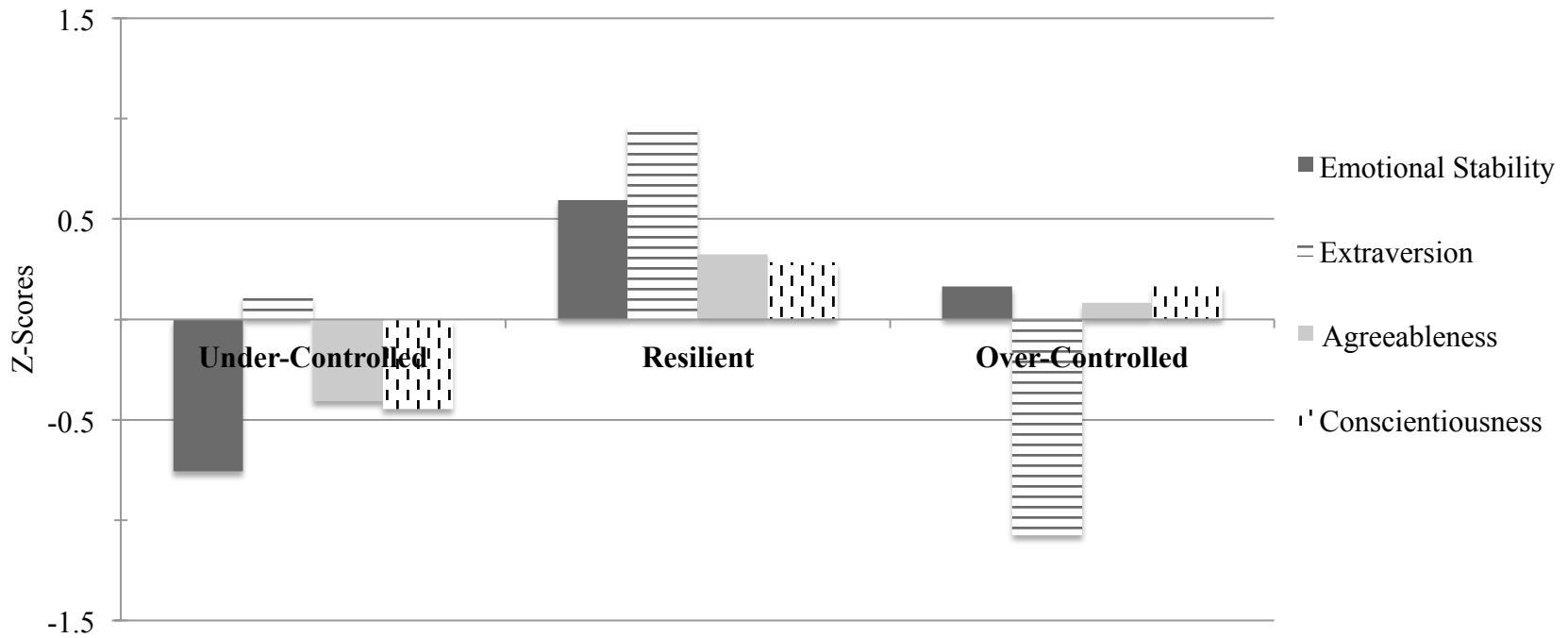*Figure 1*. Graphical depiction of ideal leader prototype patterns

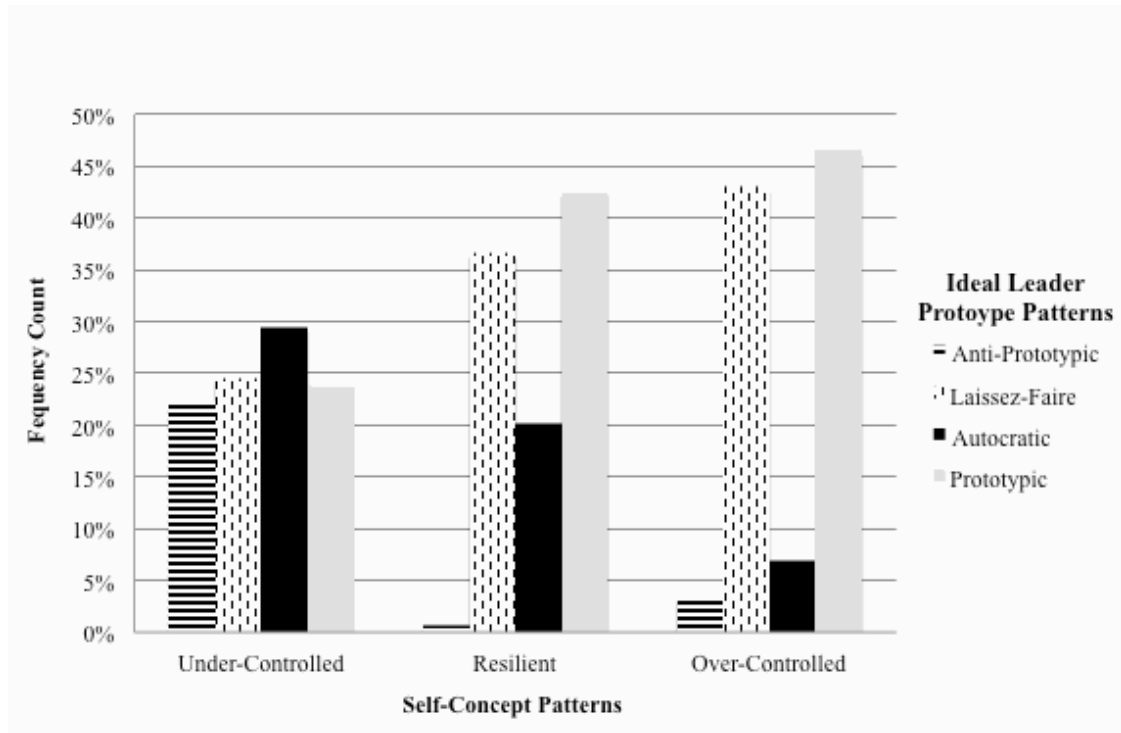*Figure 2*. Graphical depiction of self-concept patterns

Figure 3. Graphical depiction of the association between Self-Concept and Ideal Leader

Prototype patterns