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BEHAVIORAL CHAMELEONS AND SITUATIONAL ENGINEERS: AN EXPLORATION OF STRATEGIES FOR ACHIEVING CONGRUENCE BETWEEN LEADERSHIP STYLE AND ENVIRONMENTAL DEMANDS

by

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A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

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Abstract

BEHAVIORAL CHAMELEONS AND SITUATIONAL ENGINEERS: AN EXPLORATION OF STRATEGIES FOR ACHIEVING CONGRUENCE BETWEEN LEADERSHIP STYLE AND ENVIRONMENTAL DEMANDS

by

Kevin C. Ruminson

Advisor: Professor Harold Goldstein

Two strategies for achieving congruence between leadership style and environmental demands are explored: adjusting style to fit situations and adjusting situations to fit style. These themes are integrated within a person-environment fit framework as different strategies that managers use. The investigator refers to these as the Behavioral Chameleon and the Situational Engineer strategies. Research explored whether locus of control, behavioral flexibility (measured by self-monitoring, range of interpersonal capabilities, and cognitive flexibility), proactive personality, and Machiavellianism are related to these strategies. Hypotheses predicted that Behavioral Chameleon strategies are positively related to behavioral flexibility and internal locus of control, and negatively related to Machiavellianism. Situational Engineer strategies were expected to be positively correlated with proactive personality, Machiavellianism, and internal locus of control. Hypotheses also predicted that individuals categorized into four quadrants based on combinations of tendencies to use the two strategies would respond differently to the personality variables. The following differences between quadrants were expected:

Quadrant 1 (low Behavioral Chameleon-low Situational Engineer) - external locus of control, low behavioral flexibility, and low proactive personality; Quadrant 2 (high Behavioral Chameleon-low Situational Engineer) - internal locus of control, high behavioral flexibility, and low Machiavellianism; Quadrant 3 (high Behavioral Chameleon - high Situational Engineer) - internal locus of control, high behavioral flexibility, and high proactive personality; Quadrant 4 (low Behavioral Chameleon-high Situational Engineer) - internal locus of control, high proactive personality, and high Machiavellianism. Participants included 59 managers, 32 MBA students, and 76 undergraduate students who completed the personality instruments and a decision making task that measured their likelihood of using Behavioral Chameleon and Situational Engineer strategies. Results supported hypothesized relationships between the Behavioral Chameleon approach and some measures of behavioral flexibility. Support was also found for the hypothesized relationship between the Situational Engineer strategy, and both proactive personality and Machiavellianism. Hypotheses regarding locus of control were not supported. Predicted differences between quadrants on proactive personality and self-monitoring were partially supported, but little support was found for other expected differences.

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CHAPTER I: INTRODUCTION

Individuals in leadership positions are likely to face many changes in environmental demands throughout their career. Even if leaders[1] work in relatively stable organizations, they will still have to deal with many changes during their progression through the organizational hierarchy. Each new position may present different challenges in terms of task structure, group composition, performance standards, and interpersonal relationships. As a result of these changes in environmental demands, different leadership styles may become more or less effective.

Established theories of leadership style propose conflicting prescriptions for how managers should achieve congruence between their leadership style and the demands of the environment. These theories can be summarized into two major themes that appear to be grounded in contradictory assumptions regarding the degree of flexibility in human behavior and in environmental conditions. One assumption has been summarized by Schneider (1987a), who states that many psychologists assume "that people are infinitely adaptable and changeable, can work under any new structure or set of procedures, and that the one best system is the holy grail" (p. 447). Theories based on this assumption have proposed or implied that leaders should be capable of changing their style to fit the specific demands of each environment they encounter (e.g., Vroom & Yetton, 1973). A contradictory theme has emerged based on the assumption that behavior is relatively inflexible and that individuals "possess certain patterns of dealing with the environment which are deeply embedded, pervasive, and likely to continue" (Kets de Vries & Miller,

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[1]This paper uses the terms 'leader' and 'manager' synonymously and adopts Yukl's (1998) definition of leaders as "people who occupy positions in which they are expected to perform the leadership role, but without any assumption that leadership processes actually occur" (p. 5).

1986, p. 266). Leadership theories within this theme view leadership style as difficult to change, and suggest that leaders should become skilled at manipulating the environment to produce a situation that matches their particular leadership style (e.g., Fiedler, Chemers, & Mahar, 1976).

A great deal of research has been conducted within each theme, but the two strategies generally have not been explored simultaneously. However, these two themes may be integrated by examining them from a person-environment interaction framework. The longstanding tradition of person-environment research has included extensive work on the manner in which individuals can achieve congruence with their environments. This research tradition points toward a potential resolution of the contradictory prescriptions for achieving congruence between leader style and environmental demands.

Within person-environment research, there has been a longstanding theoretical and philosophical debate regarding the interaction between persons and their environments (Mitchell & James, 1989a). The first position in the debate is that advocated by individuals such as Darwin, Spencer, and Dalton, who emphasized human adaptation to environments, and thus "the differences in humans abilities to make successful adjustments became their domain of study" (Mitchell & James, 1989a, p. 331). The second position is that advocated by individuals such as James and Dewey, who viewed "humans as active/reactive beings who could both change their environment and be changed by it" (Mitchell & James, 1989a, p. 331). A central premise of this dissertation is that James and Dewey's position regarding the relationships between persons and their environments provides a useful framework in which to integrate the two seemingly contradictory themes described above. Instead of viewing these themes as

competing hypotheses, it may be more appropriate to view them as different strategies that leaders use to deal with new situations or changing environments. When faced with mismatches between leader style and the demands of the environment, effective leaders may act as 'Behavioral Chameleons,' who adjust their leadership style to fit situational demands, or may act as 'Situational Engineers[2],' who manipulate environmental factors to make a preferred leadership style more appropriate.

Delimitation of Scope and Hypotheses

This dissertation explores methods for achieving person-environment congruence that are suggested by the person-environment interaction literature and discusses how these strategies relate to past research on leadership style and effectiveness. The dissertation presents research designed to explore individual differences related to the use of 'Behavioral Chameleon' and Situational Engineer' strategies in a managerial decision making context. The theoretical integration of these seemingly contradictory theories of leader effectiveness raises a number of questions that are beyond the scope of this dissertation. Thus, this dissertation does not exhaustively test this integrated model, but explores several important aspects of it.

It is hypothesized that personality variables signifying behavioral flexibility and a belief in one's own ability to affect outcomes will be related to the Behavioral Chameleon approach. Specifically, it is expected that high self-monitoring, high range of interpersonal capabilities, high cognitive flexibility, low Machiavellianism, and an internal locus of control will be related to the tendency to use the Behavioral Chameleon

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[2] The term 'Situational Engineer' is adapted from Fiedler's (1967) contingency model and the subsequent LEADER MATCH training program (Fiedler, Chemers, & Mahar, 1976), which teaches 'situational engineering,' in which the leader makes adjustments in the environment so that it becomes more favorable to a given leadership style.

approach. Second, it is predicted that personality variables related to the tendency to manipulate environments, an interest in fulfilling personal needs, and a belief that one can have an impact on outcomes will be related to the Situational Engineer approach. Specifically, high proactive personality, high Machiavellianism, and an internal locus of control, are hypothesized to be related to the Situational Engineer approach. It is also hypothesized that individuals who have a tendency to rely on either a Behavioral Chameleon or a Situational Engineer approach, individuals who use both strategies, and individuals who use neither strategy will respond differently to these individual difference variables.

In summary, this dissertation suggests that changing behavior to fit environments and changing environments to fit behavior are both strategies that leaders may use, and that individual differences in personality are related to tendencies to use Behavioral Chameleon or Situational Engineer strategies. Chapter II explores the literature that serves as a background to the research and Chapter III discusses the hypotheses in much greater detail. A detailed description of the methodology is presented in Chapter IV. The study involves the collection of data through a battery of personality instruments and through a scenario based managerial decision making task. Chapter V reports the results of the study. Hypotheses were tested using correlation analysis and analysis of variance. Chapter VI discusses the results, suggests areas for future research, and describes the limitations of the study.

CHAPTER II: LITERATURE REVIEW

This review suggests that much of the past leadership style and effectiveness research can be viewed as a subset of the broader field of person-environment (P-E) interaction and congruence. The review begins with a discussion of past approaches to leadership style. Next, various approaches to congruence and theoretical methods for correcting mismatches between the person and the environment are discussed. Specifically, the review focuses on flexibility of personal behavior and manipulation of environments as two strategies for achieving congruence between behavior and environmental demands. Next, these themes from the P-E congruence literature are linked to similar themes in the leadership literature, which the investigator refers to as the 'Behavioral Chameleon' and 'Situational Engineer' strategies to achieving congruence between leader behavior and the demands of the leadership situation. The literature review concludes with a discussion of how these strategies and their assumptions can be integrated into a coherent theory of leader style-environment congruence.

Leadership Style and Leader Effectiveness

In the leadership literature, leader style has generally been conceptualized in two different ways. First, style has been conceptualized as level of task or structure oriented behavior and level of relationship or consideration oriented behavior. Second, leader style has been defined as the level of participation in decision making that a leader allows his or her direct reports.

Task Orientation/Initiating Structure and Relationship Orientation/Consideration

One early approach to leadership research was the study and classification of leader behavior. Such research generally focused on either describing the tasks involved

in managerial positions, or focused on the different behaviors displayed by effective and ineffective managers (Yukl, 1998). Well known studies include the Ohio State and Michigan Leadership behavior studies. Results from the Ohio State studies (e.g., Fleishman, Harris, & Burtt, 1955; Fleishman & Harris, 1962) indicated two broad categories of leadership behaviors. The first category contained behaviors aimed at improving subordinate satisfaction and morale (labeled consideration), whereas the second category contained behaviors aimed at structuring the group towards accomplishing a task (labeled initiation of structure). The Michigan Leadership studies resulted in two similar categories of leader behaviors, which were labeled "task" and "relationship" oriented behaviors (Likert, 1961, 1967). Alternately, these styles have been categorized as job-centered or employee-centered styles of leadership (Erez, 1980), or as performance and group maintenance oriented behaviors (Misumi & Peterson, 1985).

This stream of research led some to conclude that the most effective leaders would be those with high scores on both dimensions (e.g., Blake & Mouton, 1964). However, the leader's situation was not considered in much of this research. Not surprisingly, later research indicated that this "high-high" management style was not always superior to other approaches in all situations (e.g., Larson, Hunt, & Osburn, 1976; Nystrom, 1978; Vecchio, 1981). The current consensus in the leadership literature is that these leadership styles do not, on their own, allow the prediction of leadership effectiveness (Fiedler, 1996). Thus, this stream of research resulted in a general recognition that no single managerial style was appropriate for all situations (e.g., Fiedler, 1996; Fiedler & Mahar, 1979; Pratch & Jacobowitz, 1997). While such two factor

models of leader behavior have been criticized as theories of leader effectiveness (e.g., Yukl, 1998; Yukl & Van Fleet, 1992), they are useful as descriptions of different styles or orientations that leaders may use when dealing with their organizational environments.

Level of Participation

Bass, Valenzi, Farrow, and Solomon (1975) argued that the two-factor conceptualization of leader style was too broad, and suggested that a better approach would be to break leader style down into the following levels of subordinate participation: Directive, negotiative, consultative, participative, and delegative styles. This second conceptualization of leadership style can be summarized "as the amount and form of involvement a superior allows her or his subordinates in decision making" (Biggart, 1981, p. 291). This approach to leadership style has a long history that can be traced back to early research by Lewin and his colleagues in the late 1930s, who conducted one of the first empirical investigations of leader style (Fiedler & Chemers, 1974). Lewin, Lippitt, and White (1939) studied democratic, autocratic, and laissez-faire leadership styles among elementary school age members of clubs. Leaders of these clubs were trained to behave in one of these three styles. According to this conceptualization, democratic leadership referred to situations in which the leader used very little criticism and punishment, encouraged participation of others in decision making, and put group decisions to a majority vote. Autocratic leaders tended to be strict disciplinarians who made all group decisions themselves. Laissez-faire leaders provided minimal group supervision.

Pratch and Jacobowitz (1997) assert that this study, and its definition of leader style as autocratic/directive and democratic/participative behavior, has been very

influential on much of the later research in this area. While some authors have argued for a "one best way" in which participative management is believed to be the most effective leadership approach, it is now acknowledged that the situation can have an impact on whether a participative or directive style will be more effective (e.g., Locke, Schweiger, & Latham, 1986; Sashkin, 1986; Vroom & Yetton, 1973).

Leadership Style as Goal Oriented Behavior

In this dissertation, the term 'leader style' will encompass both concepts briefly reviewed above (task or relationship oriented behavior and level of subordinate participation) and will view the use of leadership style as "a calculated way of soliciting the commitment and obedience of subordinates to the goals of the executive" (Biggart, 1981, p. 206). This approach makes the important point that a manager's use of a leadership style is typically aimed at achieving certain outcomes. According to this approach, a leader is not, for example, directive merely for the sake of being directive, but because he or she uses this style to achieve certain goals. However, different management styles may be more or less effective as situations change. Thus, it is important to explore how leaders attempt to maintain congruence between the style they use and the changing demands of a dynamic environment.

Leader Effectiveness and Person-Environment Congruence

Although motivation and ability are important for effectiveness, individual performance is also affected by environmental constraints (Peters & O'Connor, 1980). Effective performance is not a universal quality of either situations or individuals, and behavior that is highly effective in one situation may be useless in another. This point

has been widely recognized within modern leadership theory. For example, Hollander and Offermann (1990) state that:

> Many situational elements are now recognized as affecting the process of leadership, in addition to the characteristics of the leader and followers. Among them are the nature of the task or activity, its history, the availability of human and material resources, and the quality of leader-follower relations (p. 180).

Similarly, Yukl (1989) states that "managerial effectiveness depends in part on how well a manager understands demands and constraints, copes with demands, overcomes constraints, and recognizes opportunities" (P. 262). Likewise, Fiedler (1996) states that:

> The ability to get a group to accomplish its mission, depends not just on the leader's abilities and attributes but also on how well the leader's personality, abilities, and behaviors match the situation in which the leader operates (p. 242).

Perhaps the area of leadership literature that most explicitly acknowledges this point has been contingency theories of leadership, such as those proposed by Fiedler (1967) and Vroom and Yetton (1973), which emerged from the recognition that leadership research needed to address the interaction between leaders and situational parameters (Chemers, 2000). Contingency models of leadership "considered leadership effectiveness to be a joint function of leader qualities and situational demands as contingencies interacting to make leader qualities variously appropriate to the task at hand" (Hollander & Offermann, 1990, p. 180). Such leadership theories that address the relationship between behavioral styles and situational contingencies either implicitly or explicitly prescribe the behavioral style that a leader should use in a given situation (Heilman, Hornstein, Cage, & Herschlag, 1984). In general, research based on these

contingency models has indicated that group performance and satisfaction tend to be higher when the personality, behavior, or decision making style of the leader matches the demands of the leader's organizational environment (Chemers, 1993).

This view of leadership effectiveness is consistent with a broader field of psychological research based on person-environment (P-E) interaction and congruence (Chemers, 1983). According to Livingstone, Nelson, and Barr (1997), P-E interaction research looks at the joint impact on outcomes of person and environment variables. This approach is implicit in contingency theories of leadership, which propose that leader style (person) and situational demands or constraints (environment) have a joint influence on effectiveness (outcome). When theorists talk about changing leader behavior in response to different environments, or changing environments to match leader behavior, they are implying different strategies for achieving person-environment congruence or fit.

Unfortunately, the link between these two streams of psychological theory and research is rarely acknowledged. Perhaps this is because past research on P-E congruence has generally focused on subjective environments and coping with stress, rather than objective environments and effective performance, and thus has not been directly applicable to much of traditional leadership research. However, as the next section will demonstrate, concepts from the P-E congruence literature can be applied to congruence between leadership style and environmental demands.

Approaches to Person-Environment Congruence

Within the stress and coping context, in which P-E interactions are typically studied, person-environment congruence has generally been defined in two ways (Kulik, Oldham, & Hackman, 1987). These can be characterized as the Needs-Supplies

approach, which focuses on whether the environment meets the needs of the individual, and the Demands-Abilities approach, which focuses on whether the individual is able to meet environmental demands (Caplan, 1987).

In the context of leadership style, a Needs-Supplies framework might explore the impact on a leader of being in a situation where he or she is able to exercise a preferred leadership style. Although research that takes the Needs-Supplies approach may be important for studying leader satisfaction or commitment to the organization, such a framework is less appropriate for the study of the effectiveness of leaders.

In contrast to the Needs-Supplies approach, the Demands-Abilities framework emphasizes congruence between the abilities of the individual and the demands of the environment. Generally, this approach has emphasized an individual's subjective cognitive evaluation of his or her ability to meet perceived environmental demands (Edwards, 1996). Within a stress framework, successful adjustment would be viewed as a function of a leader's perceptions that he or she possessed the abilities to meet situational demands. However, a leader's actual ability maintain congruence between leadership style and environmental demands is likely to be much more important for leader effectiveness than personal beliefs about his or her ability to do so (although such beliefs may be an important pre-condition of effectively meeting environmental demands).

A more objective version of the Demands-Abilities approach is implicit in many contingency theories of leadership. These leadership theories advocate leadership styles that will be effective in the context of various environmental constraints. Successful leadership is seen as the result of matching the appropriate leader style (e.g., Vroom &

Yetton, 1973), or the individual with the appropriate style (e.g., Fiedler, 1967), to various environmental demands. Thus, a number of leadership theories appear to view effectiveness in a manner similar to the Demands-Abilities framework, in which it is implied or assumed that effective leaders have the actual *ability* to display leadership styles that meet actual environmental *demands*. Thus, contingency theories of leadership can be viewed as a subset of the Demands-Abilities framework, which emphasizes actual demands and abilities, rather than subjective congruence and stress.

Person-Environment Congruence in Dynamic Environments

While the Demands-Abilities approach provides a useful framework in which to explore contingency leadership theory, this approach often does not explicitly consider the changing nature of environments. Although optimal managerial performance is only likely to occur when the behaviors exhibited by the leader match the demands of the situation, the instability and dynamic nature of current organizational environments (e.g., Ilgen & Pulakos, 1999; Pulakos, Arad, Donovan, & Plamondon, 2000) indicates that congruence may be difficult to sustain. Bons and Fiedler (1976) noted almost a quarter of a century ago that "changes in a leader's organizational environment are an everyday occurrence" (p. 452). Similarly, Bass (1990) states that "leadership must be conceived in terms of the interaction of variables that are in constant flux" (p.76). Although adaptation to environmental change has always been necessary for organizations, both the type of change and the pace of change are increasing (Pulakos et al., 2000). As a result, constant adjustments must be made to optimize the fit between leader behavior and environmental demands. Thus, a picture of leader style-environment interaction emerges that is similar to the situation facing P-E researchers, described by Mitchell and James

(1989b) as "one of constant change and reciprocal interaction designed to produce a fit for the moment" (p. 402).

Organizations typically hire individuals to fill a specific slot within the organization, even though the demands of this "slot" are likely to change over time (Muchinsky & Monahan, 1987). Unless organizations are willing to rotate managers every time the situation changes (an unlikely strategy), leaders are likely to face mismatches with the environment. Thus, if a P-E framework is to be useful for leadership research, it must take into account the dynamic nature of the environment and the ways that leaders can maintain congruence over time between their behavior and situational demands.

Kirton and McCarthy (1988) propose an approach to P-E congruence that may be useful in the context of dynamic environments. They suggest that the Needs-Supplies and Demands-Abilities approaches to P-E congruence should be supplemented by a 'cognitive fit' approach, in which an individual's "cognitive personality style (i.e. stable preferred ways of behavior) will determine how the individual appraises the problems associated with fit, and the types of solutions produced in trying to improve fit" (p. 175). Thus, individuals may have different strategies that they use for achieving P-E congruence. This approach to P-E congruence emphasizes different manners of viewing environments and different strategies for achieving congruence, rather than focusing on congruence between individual needs and abilities and a generally static environment.

Applied to a leadership context, this final framework raises the question of "what strategies can leaders take to deal with a mismatch between leader style and environmental demands?" and "are individual differences related to the approach an

individual is likely to take in a leadership situation?" These are they types of questions that this dissertation asks and subsequently attempts to answer. Thus, this dissertation focuses on leaders' strategies for achieving congruence between leader style and dynamic environments.

Approaches to Achieving Congruence

Leadership research over the past century indicates that no single style of leadership behavior is effective in all situations (Fiedler, 1996; Fiedler & Mahar, 1979; Pratch & Jacobowitz, 1997). However, little research has been conducted on the strategies that leaders use to deal with the incongruence between behavioral style and environmental demands that may result from changing situations. Again, person-environment congruence theory offers a potentially useful framework for exploring this issue.

Theoretically, good fit with new and changing environments may be achieved in several different ways. In some cases, an individual may have a good match with the environment immediately upon entering the situation and person-environment congruence is achieved with little effort. This may be a result of careful selection of environments by the individual, or may be the result of chance. In any case, neither the person nor the environment is required to change in order to achieve congruence. In the context of leadership style, this may occur when the manager's preferred style of leadership effectively meets the demands of the situation. However, in many cases, new situations or environmental changes are likely to place new demands on individuals. For example, this preferred leadership style may no longer be effective because of changes in the situation.

One response to such a mismatch may be to ignore and avoid the problem as much as possible (Latack & Havlovic, 1992), or to distort environmental feedback in order to reduce subjective perceptions of incongruence (Tsui & Ashford, 1994). Similarly, French, Rodgers, and Cobb (1974) suggest that the individual may respond to incongruence with environments without making any objective changes by subjectively changing their perceptions of the self and/or the environment. French et al. (1974) label this approach "defense." Although such strategies may be effective in terms of temporarily decreasing stress, leaders who use a passive, defensive, or avoidant approach are likely to be unsuccessful as old strategies and styles continue to be implemented even when they are no longer effective. As French et al. (1974) point out, such strategies decrease the individual's contact with reality. Thus, these authors suggest that an individual who defensively minimizes environmental demands, such as demands from one's boss, will run the risk of being fired. Alternately, this may lead an individual with poor environmental fit to leave in search of a new environment that is a better fit—either in another position, or in another organization (Tsui & Ashford, 1994; Tsui, Ashford, St. Clair, & Xin, 1995). These consequences of person-environment incongruence are consistent with Schneider's (1987a, 1987b) attraction-selection-attrition theory, which suggests that, over time, individuals will tend to leave or be forced out of environments with which they have poor fit. While these strategies may ultimately lead the individual to find an environment for which he or she is better suited, or may temporarily reduce stress in the current situation, they are unlikely to allow a leader to be effective over time.

In contrast to these defensive or avoidant strategies, individuals can use several active techniques to actually improve person-environment fit (Caplan, 1987; French et al.

1974, Pratch & Jacobowitz, 1997). The literature refers to the process of correcting mismatches as 'coping' (French et al. 1974) or 'adjustment' (Nicholson, 1984).

These active strategies may involve either personal or environmental change. A number of authors within the P-E literature have acknowledged the existence of these two active strategies for achieving Person-Environment congruence. For example, Nicholson (1984) states that "the process of adjustment poses for the person the fundamental alternatives of adapting to meet environmental requirements or manipulating the environment to meet personal requirements" (p. 174). Rothbaum, Weisz, and Snyder (1982) suggest that changing the environment to fit personal wishes or changing the self to fit the environment can both be viewed as methods individuals use to gain control over outcomes. Similarly, Saks and Ashforth (1997) discuss proactive socialization, in which organizational newcomers actively seek out ways they can adapt to organizational norms or search for ways to change these group norms to fit the newcomer's preferences. Likewise, Dawis and Lofquist's (1976) discussion of approaches to achieving congruence with the work environment includes reactive strategies, in which individual attempt to change themselves to achieve correspondence with the environment, and active strategies, in which individuals attempt to change the environment to create fit. French et al. (1974) refer to these two strategies as 'adaptation' and 'environmental mastery'. Both adaptation and environmental mastery involve active attempts by the individual to achieve congruence with the situation. Within a leadership context, these active strategies are likely to be far more effective strategies than defensive or avoidant strategies because they are problem-focused strategies aimed at correcting incongruence.

A Reinterpretation of Past Leadership Research within a Person-Environment Framework

Although not explicitly stated, several prominent leadership theories imply methods for achieving congruence between leadership style and the demands of the environment that are highly similar to either the 'adaptation' strategy or the 'environmental mastery' strategy. Such research has resulted in two classes of leadership theories that rest on generally untested assumptions.

First, a certain class of leadership theories assumes that (1) leader behavior is nearly infinitely flexible and that effective leaders are able to accurately read their environments and adjust their behavior to fit environmental demands, and (2) it is easier to change an individual's behavior than it is to change environmental conditions. Thus, this class of theories suggests that leaders should respond to environmental demands and constraints by changing their own behavior. Within this approach it has been argued that an effective leader:

> Is one who maintains a high batting average in accurately assessing the forces that determine what his most appropriate behavior at any given time should be and in actually being able to behave accordingly (Tannenbaum & Schmidt, 1958, p. 101).

Thus, this approach assumes that leader effectiveness results from monitoring the environment for changes, and adjusting leadership style to fit the demands of environments. Because this approach requires constant change in personal behavior, this approach will be referred to as the 'Behavioral Chameleon' strategy for achieving congruence with environmental demands.

In contrast, a second class of leadership theories assumes that (1) leader behavior is difficult to change and (2) the most effective strategy for achieving leader effectiveness

is to match a leader with a given style to specific situations in which that style is appropriate, or to engineer the situation so it fits the leader's style. This approach assumes that "it is surely easier to change almost anything in the job situation than a man's personality and his leadership style" (Fiedler, 1965, p. 115). Because this second approach assumes that congruence between leader style and environmental demands may be achieved by 'engineering' situations that match a preferred style, this approach will be referred to as the 'Situational Engineer' strategy. The next section presents a detailed explanation of how past leadership theories support these two strategies for achieving person-environment congruence in a leadership context.

Behavioral Chameleons: Adjusting Behavior to fit Environmental Demands

A number of leadership theories have proposed that the key to effective leadership is to adjust leadership style as changes in environmental conditions make new behaviors more appropriate. This approach assumes that different situations call for different behaviors, and thus leaders should attempt to modify their behavior to fit the demands of the environment. For example, Goleman (2000) states that "the business environment is continually changing, and the leader must respond in kind" (p. 90). While individuals may have preferred leadership styles, this approach assumes that effective leaders will attempt to change their leadership style to fit the specific constraints of whatever situation they encounter. In support of this approach, James and White (1983) report that "behaviors of a particular leader appear to change naturally as a function of both the situation and the individual supervised" (p. 850). Thus, such leadership research and theory suggests that effective leaders approach environmental incongruence with a Behavioral Chameleon strategy in which they adjust their leadership style to fit

environmental demands. Leadership theories that are supportive of, or consistent with, the Behavioral Chameleon approach include modern leader trait theory, exchange leadership theories, the theory of Servant Leadership, and several contingency theories of leadership.

Modern Leader Trait Theory

Research on leader traits was stagnant for a number of decades following several literature reviews published in the 1940s and 1950s, which concluded that this approach led to few useful results (e.g., Stodgill 1948; Mann, 1959). However, the study of traits relevant to leadership has been revived in recent years. One example of such research is Kenny and Zaccaro's (1983) reanalysis of data from rotation design research from the 1960s. Rotation designs involve placing individuals in groups to work on a task, and then rotating group membership, type of task, or both. Their analysis revealed that between 49% and 82% of the variance in leader emergence could be attributed to stable individual characteristics. They proposed that one such stable characteristic was "the ability to perceive the needs and goals of a constituency and to adjust one's personal approach to group action accordingly" (Kenny and Zaccaro, 1983,p. 678). Further research by Zaccaro, Foti, and Kenny (1991) indicated that behaviorally flexible individuals (measured by high scores on Snyder's Self-Monitoring Scale) were significantly more likely to emerge as leaders both across groups, and across tasks. This research indicates that behavioral flexibility may be useful for leaders or for those seeking leadership positions. Thus, modern trait theory and research has produced evidence that is supportive of the Behavioral Chameleon strategy for achieving congruence between leader style and environmental demands.

Exchange Theories

Exchange theories of leadership focus on the reciprocal interaction between leaders and subordinates. These theories suggest "that group members make contributions at a cost to themselves and receive benefits at a cost to the group or other members. Interaction continues because members find the social exchange mutually rewarding" (Bass, 1990, p. 48). Examples of exchange theories include Vertical Dyadic Linkage (VDL) theory (Dansereau, Graen, & Haga, 1975), and an extension of this theory known as Leader-Member Exchange (LMX) theory (Graen & Cashman, 1975). Both theories are based on the assertion that leaders develop different relationships with subordinates involving different demands. The leader's "in-group" receives more rewards, but the leader also demands more of them, whereas the "out-group" receives fewer rewards, but they are subject to fewer expectations and demands. Meta-analysis of the results of research within this framework suggests that satisfaction, turnover intentions, performance, commitment, role conflict, role clarity, and member competence are all correlated with the quality of the leader-member relationship (Gerstner & Day, 1997).

The performance and effectiveness of subordinates can be viewed as one form of the situational constraints or environmental demands that a leader must face. In a VDL or LMX context, leaders achieve congruence with their environments by adjusting their behavior (expectations and demands) to fit the effectiveness and performance of subordinates. Although not specifically concerned with style, it seems likely that leaders would allow different levels of participation for high versus low performing subordinates, and would give different levels of task and consideration related behaviors to in-group

and out-group members. Thus, exchange theories of leadership provide some support for the Behavioral Chameleon approach.

Servant Leadership

Another relevant, but less widely known leadership theory is the concept of Servant Leadership developed by Greenleaf (e.g., Greenleaf, 1991). This theory advocates an approach in which the leader attempts to discover the needs and goals of the group and then acts to meet those needs. Such an approach could be viewed as a Behavioral Chameleon strategy in which the leader learns what his or her direct reports need or want and adjusts his or her behavior fit this aspect of the environment. While little research on this theory has been published in academic psychology or management journals, the concepts underlying this theory imply a Behavioral Chameleon approach.

Contingency Theory

Contingency Theory is another class of leadership theories relevant to the Behavioral Chameleon approach. Contingency theories of leadership assume that no single leadership style will be equally effective in all situations (Vroom & Jago, 1995; Yukl & Van Fleet, 1992). Contingency theories relevant to the Behavioral Chameleon approach include Path-Goal Theory (Evans, 1970, 1974; House, 1971; House & Mitchell, 1974), Situational Leadership Theory (Hersey & Blanchard, 1977), and the Normative Decision Model (Vroom & Yetton, 1973; Vroom & Jago, 1988).

Path-Goal Theory.

One theory that implies that leadership behavior should be based on the demands of the environment is Path-Goal Theory (Evans, 1970, 1974; House, 1971; House & Mitchell, 1974). Evans (1970, 1974) suggested that leaders could influence subordinate

performance by making valued rewards available to subordinates (demonstrating consideration) and distributing these rewards based on their performance (demonstrating initiation of structure). According to this approach, different task and subordinate characteristics require different leadership styles in order to effectively motivate subordinates. Thus, the leader should examine situational characteristics and, depending on the environmental characteristics, should use different levels of supportive, directive, participative, or achievement-oriented leadership behaviors (House & Mitchell, 1974). This theory advocates a Behavioral Chameleon strategy for achieving congruence between behavior and environmental demands. Although this theory has been widely researched, the results have been inconclusive (Yukl, 1998).

Situational Leadership Theory.

Similarly, Hersey and Blanchard's (1977) Situational Leadership Theory suggested that leaders should vary their style in relation to subordinates' job maturity (individual skills and knowledge) and psychological maturity (self-confidence and self-respect). Different amounts of task oriented and relationship oriented leader behaviors are prescribed for different levels of subordinate maturity. Thus, a leader must be flexible in his or her leadership style, and must also be able to recognize the important features of a given leadership situation in order to choose the style that is appropriate. This approach has proved popular in practice (e.g., management development workshops), but has not been widely researched (Yukl & Van Fleet, 1992). Nonetheless, this approach advocates a Behavioral Chameleon approach for achieving congruence between leader style and environmental demands.

Normative Decision Model.

Vroom and Yetton's (1973) normative model is probably the most prominent theory that argues for adjusting leader style to fit environmental demands. This model proposes that no single leadership style is appropriate across all situations. The model lays out a normative framework by which leaders can analyze the situation and choose the style of leadership decision making that is most appropriate. Situational factors include the importance of reaching a high-quality decision, the leader's and subordinate's level of knowledge relevant to the decision, the extent to which subordinate commitment is necessary, and the extent to which there is likely to be disagreement among subordinates regarding the preferred decision.

Vroom and Jago (1995) assert that other contingency theories of leadership (e.g., Fiedler, 1967; Hersey & Blanchard, 1982) prescribe different behaviors for managers in different roles, but do not suggest that managers should adjust their behavior in response to changes in demands within roles. This model assumes that the optimal amount of participation in each discrete decision making episode can be determined independently of prior and future decision making episodes.

Yukl (1998) reports that this model has probably received more empirical support than any other situational theory of leadership. While some continue to debate its validity, this theory has proved to be very popular in the field of leadership (Bass, 1990). However, the model rests on several assumptions that have not been tested (Yukl, 1998). This model assumes that managers have the ability and skill to implement whatever style is called for by a particular situation (Crouch & Yetton, 1987). Furthermore, the model assumes that managers will be able to accurately read the information from the

environment that will lead to a correct choice of style. Also, Vroom and Yetton's (1973) theory does not take individual differences in leader personality into account (Fiedler & Garcia, 1987). Thus, this theory appears to assume that leaders are interchangeable and are (or should be) capable of engaging in whatever leadership style is called for by the situation. As Fiedler and Garcia (1987) point out, such approaches are limited in their predictive ability because they explain how situations can impact the effectiveness of decisions, but do not explain how two different leaders in the same situation will have major differences in effectiveness. However, this approach is consistent with the Behavioral Chameleon strategy for achieving congruence between leader behavior and environmental demands.

Summary of the Behavioral Chameleon Approach

A number of theories of leadership are based around the belief that effective leaders change their behavior in response to changes in the environment. This theme of research and theory has assumed that leaders are capable of displaying a wide range of leadership styles and that congruence between leader behavior and environments is assumed or prescribed to take place through such changes. Thus, this theme emerges from a view of leaders as highly flexible individuals who adapt to the environments they encounter.

Situational Engineers: Adjusting Environments to fit Behavior

A number of authors have questioned the ability of leaders to successfully adapt their behavior to all situations. For example, Gabarro (1985) states that "the all-purpose general managers who can parachute into any situation and succeed is a myth" (p. 122). Similarly, Bass (1990) point out that it is fairly easy to identify individuals who are

leaders, but "it is quite another matter to place these persons in different situations where they will be able to function as leaders" (p. 76). Others have suggested that although leaders are able to change their style, most probably do not have the flexibility to be effective in all organizations and situations (e.g., Wissema, Van Der Pol, & Messer, 1980). Likewise, Szilagyi and Schweiger (1984) state that "managers are not infinitely flexible in exhibiting a full array of styles and behaviors, but generally depend on only a few" (p. 631).

Consistent with this view, an alternate approach has developed that is based on the assumption that leaders are not infinitely flexible in their leadership style. This approach has resulted in quite different prescriptions for leader effectiveness than those proposed by theories within the Behavioral Chameleon theme. For example, Wiberg, (1989) suggests that leaders find it hard to display behaviors that do not correspond with their natural or preferred leadership style. Thus, managers should work on improving their existing style rather than wasting effort on attempting to adopt a style that does not come naturally. Other researchers have suggested that leaders should be matched to the particular strategies for which their preferred leadership style and skills are most appropriate (e.g., Leontiades, 1982; Szilagyi & Schweiger, 1984).

In the current business climate, where fierce international competition and increased workforce diversity have resulted in the need for quick and innovative reactions to changing conditions (Conger, 1993), the idea of matching specific leader styles to specific situations may seem obsolete. After all, the conditions that make a particular style appropriate may quickly change and thus eliminate any advantage of having an individual with a specific style in that situation. Furthermore, in a tight labor market,

organizations may have greater difficulty finding leaders who match specific strategies.

However, to the extent that an individual has control over various factors in the environment, he or she may be able to remain effective, without changing his or her leadership style, by manipulating the situation to maintain the usefulness of a specific style. As Caplan (1987) points out, "it may be natural for most employees, from executives to line workers, to prefer to attain their own fit by having the environment change (essentially, 'let them change, not me')" (p. 258). Numerous anecdotes indicate that individuals with poor person-job congruence are able to adjust jobs to better fit their abilities (Kulik et al., 1987). When an individual is given greater formal authority to make changes in the environment, such as when he or she is placed in a leadership position, the tendency to attempt to change the environment, rather than make adjustments in personal behavior, may become even stronger.

Unfortunately, there has been a scarcity of research in the psychological literature on how individuals can make changes in their social environments while making relatively few personal changes (Nicholson, 1984). Although many leadership theories take into account the importance of the situation, the emphasis has typically been placed on how the effectiveness of certain leader behaviors or traits are nullified or enhanced by situations (Yukl, 1998). For example, Perrow (1970) asserts that "leadership style is a dependent variable which depends on something else. The setting or task is the independent variable" (p. 6). Such theories typically do not consider the potential impact on the situation that leaders may have (Chatman, 1989). Thus, the situation is viewed as a "given" that the leader must react to by adjusting his or her style. However, a complete person-environment theory must consider both the impact of the environment on the

individual and the impact of the individual on the environment (Chatman, 1989, 1991).

Although the ability of leaders to manipulate their environments is not explicitly discussed in many leadership theories, several authors have pointed out that leaders are capable of influencing their environments. For example, Hollander and Julian (1969) state that "rather than standing apart from the leader, the situation perceived to exist may be his own creation" (p. 389). Bass (1990) suggests that "one must keep in mind that leaders are not merely reactive; often they change the situation to suit their own proclivities" (p. 565). Similarly, Tsui et al. (1995) assert that managers do not merely respond passively and adjust behavior in response to demands from their social environments, but instead, may attempt to actively influence subordinates' expectations and opinions. Thus, the relationship between individuals and organizations can be viewed as a reciprocal one in which employees are influenced by their organizations, but also are able to change their environments (e.g., Schein, 1971).

Within a leadership context, this approach to achieving person-environment congruence can be viewed as the 'Situational Engineer' approach. The Situational Engineer strategy involves exercising one's control over environmental factors in an attempt to create a scenario in which preferred behavioral styles can be effective. This may be done through actions such as manipulating the perceptions and assumptions of others, modifying social relationships, changing job tasks, changing structural elements, hiring and firing, or choosing particular markets or product areas. A leader may even be able to avoid changing his or her leadership style by building "a team with members who employee styles that [he or] she lacks" (Goleman, 2000, p. 89).

Although it may be easy to confuse the Situational Engineer approach with

directive leadership, this is not the case. While some leaders who take a Situational Engineer approach may prefer a directive style, others may actually prefer to use a participative or delegative leadership style, and thus engineer the situation to make subordinate participation more appropriate. Perhaps a good example can be drawn from Biggart's (1981) analysis of former President Ronald Reagan's leadership style during his governorship of California. Based on an analysis of extensive interviews with members of his administration, Biggart (1981) concludes that Reagan's preferred managerial style was an extreme form of delegation. Reagan actively managed the symbolic aspects of his office and maintained an oversight role, but left much of the administrative decision making to subordinates. In order for extreme delegation to work, Reagan selected members of his administration whose "credentials showed them to be philosophically aligned and administratively experienced, and then delegated them extensive authority" (p. 299). He rigidly maintained this management style by refusing to involve himself in policy disputes between subordinates and by expecting them to come to him with a consensus. Thus, Reagan's leadership style as described by Biggart (1981) can be viewed as a Situational Engineer approach. Reagan selected individuals who would allow his preferred management style to work, and rigidly maintained this approach to the extent that subordinates learned they had to work out disagreements before meeting with the Governor, because of his refusal to exercise authority and adjudicate disputes. Thus, Reagan structured his cabinet, and the interactions of its members, in a way that was consistent with his preferred delegative managerial style.

A second example can be seen in the writings of Sashkin (1984, 1986), who argued that participative management is a "moral imperative." While he acknowledges

that participative management may not be practical or effective in all situations, he argues that we know enough about the conditions in which this style can be effective that we should construct organizational situations in which this style can be used successfully. Thus, he appears to advocate a Situational Engineer approach in which each situation is modified in such a way that a participative style is appropriate. A leader who takes such a philosophy, or who merely prefers operating in such a manner, may view situations as malleable, rather than set in stone, and may do everything in his or her power to align the situation with his or her preferred approach.

Like the Behavioral Chameleon approach, a number of theories of leadership are generally supportive of, or consistent with the Situational Engineer approach. Specifically, Fiedler's (1967) contingency model, Yukl's (1971, 1998) Multiple Linkage model, Wofford's (1982) Leader-Environment-Follower Interaction theory, and Kerr and Jermier's (1978) Leadership Substitutes Theory are supportive of such an approach. Even though they do not take a Situational Engineer approach into account, Normative Decision Theory, (Vroom & Yetton, 1973), Situational Leadership Theory (Hersey & Blanchard, 1977), and Path-Goal theory (Evans, 1970, 1974; House, 1971; House & Mitchell, 1974), if slightly re-conceptualized, can be viewed as consistent with this approach. In addition, Exchange theories of leadership may be viewed as consistent with this approach.

Fiedler's Contingency theory

Fiedler (1967) suggested that individuals have a basic leadership style, which is based on their personality or motivational structure, and thus is difficult to change. In this theory, "successful leaders 'fill voids' in situations on the basis of having

characteristics deemed necessary to be an effective match with environment" (Muchinsky & Monahan, 1987, p. 273). In an extension of the original contingency model, Fiedler and colleagues also argued that mismatches between leader style and situational factors could be overcome by manipulating the situation so that the leader's behavioral style becomes appropriate (Fiedler et al., 1976). Based on this theory, a program known as LEADER MATCH was developed to train managers how to identify their own leadership style, diagnose the situation, and manipulate the situation so that it will fit their style (Fiedler & Mahar, 1979; Fiedler & Chemers, 1984). Fiedler (1996) recently argued that research on LEADER MATCH has shown that engineering the leadership situation is easier than most people think.

Fiedler's (1967) contingency model was groundbreaking in several ways. First, according to House and Podsakoff (1994), "Fiedler's contingency model was perhaps the first approach designed to incorporate specific aspects of the situation into a comprehensive theory of leadership" (p. 51). Second, even though most research on Fiedler's model does not acknowledge this point, Chemers (1983) states that this theory is among the earliest and most widely researched models of P-E fit in organizations.

Although not without its critics (e.g., Kabanoff, 1981; Jago & Ragan, 1986), a number of studies conducted in both civilian and military organizations have provided some support for this approach (Fiedler & Mahar, 1979). While a large amount of research has been conducted on the LEADER MATCH training program, threats to validity in many of the studies make it difficult to draw confident conclusions regarding the efficacy of this program (Goldstein, 1993). Fiedler's contingency model has generated more research than any other leadership model, but the reliability, validity, and

meaning of the model continue to be debated (Bass, 1990; Yukl, 1998). However, this theory is highly supportive of the Situational Engineer strategy for achieving congruence between leader style and environmental demands.

Multiple Linkage Model

Yukl's Multiple Linkage Model (Yukl, 1971, 1998) is another contingency leadership theory that provides support for the Situational Engineer approach. In this theory, the leader influences group performance through his or her impact on intervening variables such as subordinate effort, subordinate ability, organization of work, cooperation, resources, and external coordination. If any of the intervening variables are deficient, group performance can be negatively affected. Yukl (1998) suggests that leaders can take corrective actions that change these situational variables in order to improve overall group performance. These actions can be both short term and long term. Short-term actions focus on intervening variables, and are generally undertaken as reactions to deficiencies, whereas long-term behaviors are more strategic and proactive.

Unlike many contingency theories, the multiple linkage model does not argue for one best leader style or behavior for a given set of circumstances. Instead, the model recognizes that different patterns of behavior can lead to group effectiveness (Yukl, 1998). Unfortunately, little research has been conducted to test this model. This is probably because, the multiple linkage model, in its current state, "is a general framework that identifies relevant variables and some of the likely causal linkages among them, rather than a formal theory with propositions" (Yukl & Van Fleet, 1992, p. 172). However, the focus on behaviors that leaders can take to change situational variables is

consistent with and supportive of the possibility that leaders can change the situation when he or she views such changes as necessary.

Leader Environment-Follower Interaction Theory

A similar contingency theory that is relevant to the Situational Engineer approach, is Leader-Environment-Follower Interaction (LEFI) theory (Wofford, 1982; Wofford & Srinivasan, 1983). Wofford (1982) proposes that leaders monitor environmental conditions that may interfere with subordinate performance, and may take action to make these intervening situational variables more favorable. According to this theory, intervening variables include subordinate ability, subordinate motivation, role clarity, and environmental constraints. Leaders can influence these variables through selection, training, job redesign, goal setting, and work reorganization. Thus, effective leaders are viewed as those who monitor the environment for variables that may constrain subordinate performance and then act to eliminate these constraints. While similar to the Multiple Linkage model in many respects, LEFI theory does not divide leader behaviors aimed at correcting environmental deficiencies into long-term and short-term actions (Yukl, 1989). Wofford and Srinivasan (1983) report that in a laboratory situation, leader actions designed to eliminate the deficiencies targeted by LEFI theory led to significantly higher subordinate performance. However, because of the complexity of the theory, it is difficult to test, and little other empirical evidence has been collected to support this model.

Overall, LEFI is supportive of the Situational Engineer approach. Rather than taking environmental variables as a given and adapting to the situation, this theory suggests that the leader is able to adjust the situation so that it is more favorable.

Leadership Substitutes Theory

In their Leadership Substitutes theory, Kerr and Jermier (1978) suggested that situational variables, such as the characteristics of subordinates, tasks, and organizations, could be arranged in such a way that formal leadership was less necessary. For example, they suggested that a highly formalized and bureaucratic work process might make supervision of subordinates unnecessary. In another example, Howell, Dorfman, and Kerr (1986) suggested that selecting mature subordinates could reduce the need for close supervision.

Bass (1990) points out that active leadership is required to develop these substitutes for leadership behaviors. Similarly, Manz and Sims (1986) suggest that self-managed teams must be developed by a leader who is outside the group. Therefore, such an approach implies that an external leaders may choose to manipulate the environment in such a way that he or she does not have to engage in formal leadership behaviors. Thus, this approach is consistent with a Situational Engineer approach in that the situation is viewed as changeable, and the leader may manipulate the situation so that he or she does not have to display certain behaviors.

Normative Decision Model, Path-Goal Theory, and Situational Leadership Theory

Three other contingency theories are also relevant to this approach. While these theories do not mention the possibility of leaders manipulating their environments, they can, with minor additions, be viewed as consistent with the Situational Engineer approach. For example, Vroom and Yetton's (1973) normative model suggests that leaders should look at characteristics such as the knowledge level of followers, the leader's own level of knowledge, and the importance of reaching a quality decision, and

then decide the amount of subordinate participation that should be allowed. However, when examining this theory within a complete person-environment congruence framework, a second approach becomes possible. Instead of examining the situational characteristics described in Vroom and Yetton's (1973) model and then deciding on the appropriate behavior, the leader may choose the style he or she wishes to use and then adjust the situation fit this style. For example, Crouch and Yetton (1987) suggest that managers who lack the skills to implement certain decision making styles "may manage their roles so that they experience problems which are consistent with their preferred behavior" (p. 395). Instead of approaching the situation as 'given,' individuals who use a Situational Engineer strategy will view these constraints as malleable, and will mold them to fit a preferred outcome.

Similar arguments could be made for House's (1971) Path-Goal theory and Hersey and Blanchard's (1977) Situational Leadership theory. Rather than looking at the characteristics of the situation to determine the appropriate behavior, as was suggested by the original description of these theories, the leader may examine the situational characteristics in order to determine what needs to be changed to make a preferred leadership style more appropriate. In a study of Situational Leadership Theory, Kivlighan (1997) found that some leaders, consistent with Situational Leadership theory, changed their style as groups matured, but that others maintained their original task or relationship oriented approach over the course of the research. Perhaps this inflexibility in the behavior of some leaders is reflective of their tendency to try to shape environments, rather than adjust behavior to fit environmental changes. Although the Path-Goal model and Situational Leadership theory do not consider this possibility, both theories may be

viewed as consistent with the Situational Engineer approach if the proposition that leaders can change situations is accepted.

Exchange Theory

Certain exchange approaches to leadership theory can also be viewed as supportive of the Situational Engineer approach. For example, Graen and colleagues (e.g., Graen, Novak, & Sommerkamp, 1982) developed Leader-Member Exchange (LMX) theory, an offshoot of Vertical Dyadic Linkage (VDL) theory, which explored the development of high and low quality leader-member relationships. Initially, this was a descriptive model of leadership, but later shifted to a prescriptive approach (Leadership Making) in which it was proposed that leaders could attempt to develop high quality in-group type relationships with *all* subordinates in order to improve group performance (Graen & Uhl-Bien, 1995). Graen and colleagues (Graen, Novak, & Sommerkamp, 1982; Scandura & Graen, 1984; Graen, Scandura, & Graen, 1986) demonstrated that manager training could improve perceptions of LMX relationships on the part of both managers and subordinates. Thus, instead of taking the quality of relationships as a "given," LMX theory provides evidence that leaders can change aspects of their environment.

The Situational Engineer approach may also be viewed as consistent with Vertical Dyadic Linkage theory, if this theory is slightly modified. VDL theory states that leaders differentiate between subordinates based on subordinate skill and performance. Although not discussed in the VDL model, a leader who did not view subordinate skills and performance as a "given" could work to improve the skills, knowledge, and performance of less effective subordinates so that they could be held to the same

standards as those in the "in-group." Thus, both of these exchange theories can be viewed is consistent with a Situational Engineer strategy.

Summary of the Situational Engineer Approach

The theme of leaders as Situational Engineers can be summed up as referring to leaders who respond to changing situations by manipulating environmental factors rather than by changing their leadership style. This theme emerges from theories that assume that leaders have difficulty in displaying a wide range of leadership styles and that congruence between leader behavior and environments takes place through matching leaders with environments, or by changing environments to match leaders.

An Integration of the Behavioral Chameleon and Situational Engineer Strategies

Researchers have generally viewed theories within the Behavioral Chameleon and the Situational Engineer themes as competing hypotheses. For example, Hill (1973) states that:

> One of the most interesting questions posed by an acceptance of the contingency model is whether a leader can behave flexibly enough to cope with varied situations or whether it is necessary either to replace the leader as the situation changes or to modify the situation to fit the leader's capabilities (p. 35).

Thus, leadership research has generally followed an 'either-or' approach in which changing behavior to fit the situation or changing the situation to fit behavior are viewed as competing prescriptions for leader effectiveness.

However, the person-environment fit literature discussed earlier indicates that it may be more appropriate to view these as two separate strategies that leaders use when confronted with new or changing environments. A few leadership theorists have made similar suggestions. For example, Hendrix and McNichols (1984) suggest that leader

effectiveness can be increased either through changing managerial styles or changing aspects of the environment. Managers can adjust their behavior to fit the expectations of their constituents, or they can attempt to change constituents' expectations to fit the manager's behavior and demands, or even eliminate constituents who do not agree with their behavior (Tsui & Ashford, 1994; Tsui et al., 1995). Although such statements have hinted at an integration of Behavioral Chameleon and Situational Engineer themes, this integration has not been made explicit and research has generally not explored these themes simultaneously. However, these themes can be theoretically integrated by accepting that both strategies are possible, rather than viewing them as competing hypotheses.

A few examples may help clarify this integration. In the first example, assume that a leader who prefers to use a participative management style begins a new job. This leader will have to deal with a number of psychological, organizational, and environmental contingency factors that can affect the success of a participative management approach (Locke et al. 1986; Sashkin, 1986). If this leader takes a Behavioral Chameleon approach, he or she will examine these contingency factors to determine the management style that is most appropriate, and will attempt to use that style, even if it is not his or her preferred style. Thus, such a leader may discover that his or her subordinates do not wish to be involved in decision making, and this leader would take on a more autocratic style, rather than attempting to motivate subordinates to take a more participative role. On the other hand, a leader who takes a Situational Engineer approach would attempt to manipulate the environmental factors in such a way that they are more favorable to his or her preferred (participative) management style. For example,

he or she could provide incentives to increase subordinate's motivation to participate in decision making.

Another example can be drawn from Yukl's (1998) suggestion of several situations in which performance and satisfaction of subordinates may be increased by specific leader behaviors. He suggests that leaders could offer more support to those assigned to stressful tasks, could give more guidance to individuals with little expertise, and could pay closer attention to important tasks and unreliable employees. This could be viewed as a Behavioral Chameleon approach in which the leader adjusts his or her behavior to improve subordinate performance and satisfaction. Although Yukl (1998) does not discuss this possibility, a leader could use a Situational Engineer strategy to attack these problems from a completely different angle with equal effectiveness. Each of these situations could be dealt with, or perhaps avoided, by adjusting environmental factors, rather than making adjustments in personal behavior. For example, the leader could assign individuals with low stress tolerance to less stressful tasks. This may remove the need for the leader to be more supportive of such individuals. The leader could assign tasks to subordinates that are within their range of expertise or could send individuals with little expertise to training programs that improve their expertise, rather than giving them more instructions. Finally, the leader could replace unreliable employees, or assign them to unimportant tasks. Again, these changes in the environment would preclude the need to change leadership style. Thus, this dissertation suggests that the same ends (congruence between leader style and environmental demands) can be achieved through very different strategies.

A thorough integration of these themes must not only suggest that both strategies are possible, but must also specify how the two strategies relate to each other. It is expected that the Behavioral Chameleon and Situational Engineer strategies are not mutually exclusive. The same individual may be able to effectively use both strategies. However, it is expected that there will be individual differences in the tendency to use each approach. By simultaneous exploring the tendency to use each strategy, it may be possible to predict four separate patterns of responses in terms of leaders' activity or passivity in dealing with environmental incongruence and their orientation towards changing their own environments or changing their own behavior in order to achieve congruence between leader style and environmental demands. Thus, a 2 X 2 contingency table can be constructed from Behavioral Chameleon and Situational Engineer strategies in order to classify individuals into four different quadrants (See *Figure 1* below).

Figure 1
Four-Quadrant model of Behavioral Chameleon (BC) & Situational Engineer (SE) Strategies

Likelihood of using Behavioral Chameleon (BC) Strategies			
	High	**Quadrant 2: high BC–low SE** Tendency to rely on Behavioral Chameleon strategies	**Quadrant 3: high BC–high SE** Active use of both Behavioral Chameleon and Situational Engineer Strategies
	Low	**Quadrant 1: low BC–low SE** Passive or avoidant response to environmental incongruence	**Quadrant 4: low BC–high SE** Tendency to rely on Situational Engineer strategies
		Low	High

Likelihood of using Situational Engineer (SE) Strategies

First, leaders who have a low tendency to use both strategies fall into Quadrant 1, which can be classified as a tendency to neither change behavior nor change their

environments. This may indicate the passive, defensive, or avoidant approach to person-environment incongruence discussed earlier in the context of person-environment literature. Second, leaders who have a relatively high tendency to use Behavioral Chameleon strategies and a relatively low tendency to use Situational Engineer strategies (Quadrant 2) may generally rely on adjusting their own behavior to achieve congruence between leader style and environments. Individuals in Quadrant 3 have a relatively high tendency to use both strategies, which may indicate a highly active stance towards improving fit between leader behavior and environmental demands. Individuals in this quadrant may be equally like to implement Behavioral Chameleon and Situational Engineer strategies. Finally, those in Quadrant 4 have a relatively low tendency to use Behavioral Chameleon strategies and a relatively high tendency to use Situational Engineer strategies. Thus, such individuals may be oriented towards changing environments in order to achieve leadership style-environment congruence.

Summary

This literature review used a person-environment framework to integrate two traditionally contradictory strategies for achieving congruence between leadership behavior and environmental demands. The review suggested that changing leadership style to fit the environment and changing environments to fit leadership style are both viable strategies for achieving and maintaining person-environment fit in a leadership context. The chapter concluded with the presentation of a four-quadrant model, which suggests that individuals with differing combinations of tendencies to use the Behavioral Chameleon and Situational Engineer strategies have distinct strategies for achieving congruence between the situation and leadership style.

CHAPTER III: HYPOTHESES

Chapter III describes the hypotheses explored in this dissertation research. This chapter presents four hypotheses regarding the relationship between specific individual difference variables and the Behavioral Chameleon and Situational Engineer strategies. Along with these specific relationships, four hypotheses are presented regarding relative levels of several personality variables within each of the four quadrants created by combinations of Behavioral Chameleon and Situational Engineer strategies.

Personality and Leadership Research

Within the P-E congruence literature, several authors have suggested that individual differences may affect the tendency for individuals to change their behavior to fit the environment, or to change the environment to fit their behavior (e.g., Dawis & Lofquist, 1976, French et al., 1974). While this suggestion has not been explored in the context of leadership, a large amount of research has been previously conducted on the relationship between personality and leadership. Thus, a brief review of this tradition of research is necessary in order to establish the context in which the current study takes place.

One of the earliest approaches to leadership theory and research was the study of leader traits, including leader personality (Hollander, 1978; Yukl, 1998). Such research was based on the "assumption that leaders possessed universal characteristics that made them leaders" (Hollander & Offermann, 1990, p. 179). This approach typically did not take environmental constraints into account and research generally focused on searching for traits that distinguished leaders from non-leaders or effective from ineffective leaders (Hollander, 1978; Yukl, 1998; Yukl & Van Fleet, 1992). As a result of several literature

reviews that were published during the 1940s and 1950s (e.g., Stodgill 1948; Mann, 1959), which reported that there were no traits that consistently differentiated leaders and non-leaders over a variety of situations, interest in studying leader traits significantly declined (Lord, De Vader, and Alliger, 1986). Similarly, Guion and Gottier's (1965) critical review of the research on personality in selection decisions dampened interested in the use of personality as a predictor of outcomes in much of industrial and organizational psychology.

However, in recent years, there has been a major renewal of interest in the use of personality in many aspects of organizational research. In a large part, this was due to the articulation of the Five-Factor model of personality (e.g., Digman, 1990) and subsequent meta-analyses that showed significant relationships between certain factors of this model and job performance (e.g., Barrick & Mount, 1991). The study of traits relevant to leadership has also been revived in recent years. Within a leadership context, interest in such research was renewed based on the findings of Lord et al. (1986) and Kenny and Zaccaro (1983). Lord et al. (1986) conducted a meta-analysis of the relationship between personality traits and perceptions of leader emergence and concluded that early reports were overly pessimistic, and that traits were more consistently related to leadership than was popularly believed. Kenny and Zaccaro (1983) also conducted a study on personality and leader emergence in which they reanalyzed data from rotation design research from the 1960s. Rotation designs involve placing individuals in groups to work on a task, and then rotating group membership, type of task, or both. Their analysis revealed that between 49% and 82% of the variance in leader emergence could be

attributed to stable individual characteristics. Together, these articles provided support for further research on leader traits and served as stimuli for future work in this area.

Much of modern trait and personality research, like earlier research, has focused on linking personality to specific outcomes, such as general performance. In the context of leadership, researchers tend to focus on the relationship between personality and leader effectiveness or leader emergence. Schneider (1996) suggests that this emphasis on personality-outcome linkages may be limiting our understanding of human behavior in the workplace. He argues that it is behavior, rather than personality that leads to outcomes, and thus we are disregarding an important step of research by ignoring the intervening behavior. Because situational variables are also likely to impact success (e.g., Peters & O'Connor, 1980), personality is likely to be a much better predictor of behavior than of outcomes. Furthermore, as Schneider (1996) argues, exploring behavior may be the key to understanding the relationship between personality and outcomes, and thus is a step that should not be ignored. Similarly, Chan and Drasgow (2001) suggest that "scientists should go beyond studying empirical relationships between individual differences constructs and ultimate performance criteria and should try to find theoretical explanations linking these constructs" (p. 496-497).

While personality-behavior linkages in organizational contexts are less commonly studied than personality-outcome linkages, a notable exception is research that has attempted to predict leader style from personality (e.g., Fleishman, 1957; Schweiger & Jago, 1982, Vroom, 1960). However, other research has demonstrated that no single leadership style is appropriate across all situations (e.g., Fiedler, 1996; Fiedler & Mahar, 1979; Pratch & Jacobowitz, 1997) and situations are constantly changing, thus calling for

different styles and approaches. Thus, an interesting, and possibly more useful, question is raised regarding the manner in which leaders respond when the situation calls for different leadership styles.

Instead of linking personality to outcomes, the current study will follow Schneider's (1996) challenge to explore the link between personality and behavior as an important step in understanding the relationship between personality and outcomes. This study attempts to demonstrate a link between personality and an individual's strategy for dealing with leadership environments that require the use of different leadership styles. Specifically, the study explores whether personality variables are related to the tendency to adjust leader behavior to fit environmental demands and the tendency to manipulate the environment to match preferred leader behaviors.

This dissertation explores several personality variables that are predicted to be related to the tendency to use Behavioral Chameleon and Situational Engineer strategies. It is predicted that individual differences in the degree to which an individual believes he or she is capable of affecting outcomes, the extent to which he or she is capable of displaying behavioral flexibility, the degree to which he or she is oriented toward changing environments, and the extent to which he or she views environments as changeable will all have an impact on which approach a leader tends to use. More specifically, it is predicted that individual difference variables related to locus of control, behavioral flexibility, proactive personality, and Machiavellianism will have a significant impact on the use of these strategies. This dissertation also explores potential differences in patterns of personality variables that may be related to the use of passive/avoidant strategies (Quadrant 1), primarily Behavioral Chameleon strategies (Quadrant 2), both

Behavioral Chameleon and Situational Engineer strategies (Quadrant 3), or primarily Situational Engineer strategies (Quadrant 4).

This chapter discusses these personality variables and presents specific hypotheses regarding their relationship to Behavioral Chameleon and Situational Engineer strategies, as well as hypotheses regarding differences in personality variables related to the four quadrants of differing combinations of these strategies.

Locus of Control

Locus of Control is the first variable expected to have an impact on the use of Behavioral Chameleon and Situational Engineer strategies. Locus of control refers to an individual's belief that his or her behavior will have an impact on outcomes (Rotter, 1966). Individuals with an internal locus of control believe that their actions can affect outcomes, whereas individuals with an external locus of control believe that external events control outcomes (Rotter, 1966).

According to French et al. (1974), both adjusting behavior to fit the environment and adjusting environments to fit behavior are active forms of coping with situational demands. Rather than avoiding the problem, individuals who take these approaches make active attempts to improve fit with the environment. Similarly, Rothbaum et al. (1982) suggest that changing the self to fit the environment and changing the environment to fit personal wishes can both be viewed strategies for gaining control over outcomes.

Both the Behavioral Chameleon and the Situational Engineer strategies can be viewed as active attempts to improve fit with the leadership environment. The former approach improves fit by adjusting leadership behavior to fit the environment, whereas

the latter approach involves changing the environment to fit leader behavior. Leaders who have a stronger belief that they are able to have an impact on outcomes may be more likely to engage in both these strategies than leaders who believe that outcomes are more affected factors beyond their control. Thus, an individual's belief that he or she can have an impact on outcomes should be predictive of the use of both Behavioral Chameleon and Situational Engineer strategies. Locus of control is one variable that is related to beliefs about the ability to affect outcomes.

The most widely used measure of Locus of Control has been Rotter's (1966) I-E (Internality-Externality) measure (Spector, 1988). However, individuals may have widely varying beliefs about their ability to affect outcomes in different parts of their daily life. Thus, Phares (1976) suggests that researchers should develop measures of this construct that are more specific to the domain under exploration. In accordance with this position, Spector (1988) developed a Work Locus of Control Scale (WLCS), which is specifically designed to assess locus of control within work settings. Low scores on the scale indicate an internal locus of control, whereas high scores represent an external locus of control. Spector (1988) reports that the WLCS had stronger relationships with a number of work related variables than did Rotter's (1966) general I-E scale. This measure appears to be an appropriate measure of locus of control within a work setting.

It is expected that the WLCS scale will be significantly and negatively correlated with tendencies to use both Behavioral Chameleon and Situational Engineer strategies, indicating a more internal locus of control for individuals with higher tendencies to use these strategies. Therefore, the following hypothesis will be tested:

> Hypothesis 1: Scores on work locus of control are significantly and negatively correlated with tendencies to

use Behavioral Chameleon and Situational Engineer strategies.

With regard to the four quadrants of combinations of the Behavioral Chameleon and Situational Engineer strategies, it is expected that there will be significant differences in work locus of control between individuals in Quadrant 1 (low BC–low SE) and those in Quadrant 2 Quadrant 3, and Quadrant 4 (high BC–low SE, high BC–high SE, and low BC–high SE). Individuals who fall into Quadrant 1 are expected to be relatively passive and avoidant in response to environmental demands. It is predicted that this orientation is related to a lack of the belief that one is able to control outcomes. In contrast, Quadrants 2, 3, and 4 involve active attempts to improve fit with the environment. It is expected that individuals in these quadrants will report a significantly greater belief in their ability to affect outcomes. Therefore, the following hypothesis will be tested.

Hypothesis 2: Individuals whose tendencies to take Behavioral Chameleon and Situational Engineer strategies place them in Quadrant 1 have significantly higher work locus of control scores than individuals in Quadrants 2, 3, and 4.

Behavioral Flexibility

Behavioral flexibility is a second variable expected to have an impact on the use of these strategies. Behavioral flexibility refers to an individuals "ability and willingness to respond in significantly different ways to correspondingly different situational requirements" (Zaccaro, Gilbert, Thor, & Mumford, p. 322). This variable is expected to have a significant relationship with the tendency to use Behavioral Chameleon strategies. As Hooijberg, Hunt, and Dodge (1997) suggest, "a broad portfolio of leadership roles makes it more likely that a managerial leader can perform the appropriate leadership role

for a given situation and meet the expectations of a variety of stakeholders" (p. 387). If a leader believes that he or she has the behavioral flexibility to use a Behavioral Chameleon approach, then he or she may be much more likely to do so than a leader who does not perceive him or herself as behaviorally flexible. Thus, individual differences in behavioral flexibility are expected to have a major impact on the tendency of a leader to use Behavioral Chameleon strategies. Several different measures of flexibility have been developed and subsequently used in research, including range of interpersonal capabilities, self-monitoring, and cognitive flexibility. Past research indicates that different behavioral flexibility measures are tapping slightly different constructs (e.g., Hall, Workman, & Marchioro, 1998). Therefore, this dissertation will explore several different measures of behavioral flexibility in order to capture the effects of different aspects of flexibility on the use of the Behavioral Chameleon strategy.

Range of Interpersonal Capabilities

Range of interpersonal capabilities is a behavioral flexibility construct that is based on an individual's self-reported capability of displaying various interpersonal behaviors, some of which are polar opposites (e.g. dominance and submissiveness). This construct refers to an individual's likelihood of displaying both socially desirable and socially undesirable interpersonal behaviors if he or she sees these behaviors as necessary. Paulhus and Martin (1987, 1988) developed a measure of the construct known as the Battery of Interpersonal Capabilities (BIC). Paulhus and Martin (1988) assert that the BIC measures "both the breadth of interpersonal repertoire and the ability to adjust behavior in accordance with situational demands" (p. 91). They point out that even if an individual has a large behavioral repertoire, he or she may fail to exhibit behavioral

flexibility if displaying certain interpersonal traits causes a large degree of discomfort and anxiety. Furthermore, anxiety may cause an individual to avoid situations in which a particular behavior may have to be displayed. Thus, Paulhus and Martin (1987) propose that an individual's capability for displaying a given behavior is assessed by (1) how likely an individual is to perform a particular behavior when that behavior is perceived to be necessary, (2) how difficult the individual perceives the use of that behavior to be, (3) the anxiety the individual feels when performing the behavior, and (4) the tendency to avoid situations where he or she would need to perform such behaviors. Thus, the BIC measures four different scales related to behavioral flexibility (global capability, difficulty, anxiety, and avoidance).

Different leadership styles are likely to require different interpersonal behaviors. For example, an individual may need to display more dominant behaviors to implement a directive leadership style than he or she would to implement a participative style. Thus, by measuring an individual's ability to display a wide range of interpersonal behavior, this measure may be related to the tendency and ability to change leadership style. The ability to display a wide variety of interpersonal behaviors, low difficulty in displaying different behaviors, low anxiety when displaying different behaviors, and a low tendency to avoid performing different behaviors should be related to a tendency to use a Behavioral Chameleon approach.

A potentially important characteristic of this test for use in leadership research is that it does not base its concept of behavioral flexibility on responsiveness to social expectations (Miller, Omens, & Delvadia, 1991). As Caldwell and O'Reilly (1982) point out, the ability to adapt behavior based on social cues may be important in some cases,

but such behavior may be detrimental in others. For example, they suggest that such flexibility may be a positive attribute in situations where an individual must work with a number of groups in which social roles and norms may differ, but may be detrimental in jobs where individuals are required to behave in consistent manner despite social pressure (such as in the military). Effective leaders may have to act in a manner that is inconsistent with the norms or expectations of the group. Although there are costs to this, such behavior may be necessary for innovation and change (Hollander, 1978). The extent to which behavioral flexibility is driven by social cues, rather than task or goal relevant environmental cues may have a negative impact on the effectiveness of Behavioral Chameleon strategies. Effective variation in leader behavior is theoretically most likely if the leader focuses on environmental demands, rather than impression management (Hooijberg, 1996). Thus, as a measure of the perceived ability to display both socially desirable and socially undesirable behaviors when the individual believes such behaviors are necessary, the BIC may be a useful way to measure flexibility that is not based on social desirability.

Self-monitoring

Although the ability to display a wide range of behaviors is important in order for an individual to be behaviorally flexible, this ability does not necessarily mean that a leader will have the perceptiveness to know when to effectively use different behaviors (Hill, 1973; Hooijberg et al., 1997; Yukl & Van Fleet, 1992; Zaccaro, Foti, & Kenny, 1991). Leaders must also have the ability to successfully differentiate between situations and to choose appropriate behaviors. Thus, individual differences in sensitivity to environments may also be an important component of the tendency to effectively use a

Behavioral Chameleon approach.

One trait that has been associated with this sensitivity towards environments, as well as behavioral flexibility, is self-monitoring (Snyder, 1974, 1979, 1987). According to Snyder (1974), self-monitoring is the extent to which an individual pays attention to cues in the social environment and adjusts his or behavior in response to these environmental cues. High self-monitors tend to use situational cues to guide their behavior, are able to accurately choose appropriate behaviors, and are good at diagnosing social situations. Thus, they are likely to be good at using leadership strategies focused on changing behavior based on environmental contingencies (Anderson, 1990). In contrast, the behavior of low self-monitors is guided by their dispositions, beliefs, values, and attitudes, rather than by social expectations. Anderson (1990) suggests that low self-monitors may not be able to effectively use approaches to leadership that are based on behavioral flexibility because they may lack the ability to accurately read the social situation, or may lack the flexibility to change their behavior.

Research on self-monitoring and leadership has generally taken place in an emergent leadership context. Several studies have found that self-monitoring was a significant predictor of leader emergence (e.g. Ellis, 1988; Ellis, Adamson, Deszca, & Cawsey, 1988; Dobbins, Long, Dedrick, & Clemons, 1990) or self-reports of leader emergence (Kent & Moss, 1990). Furthermore, research using rotation designs, in which subjects participate in multiple tasks and/or groups, found that self-monitoring is significantly predictive of leader emergence across groups and tasks (Zaccaro, Foti, & Kenny, 1991). Thus, self-monitoring may be an important predictor of flexibility in leader behavior.

Cognitive flexibility

Another variable that may capture relevant behavioral flexibility is the construct of cognitive flexibility. Martin and Rubin (1995) define cognitive flexibility as "a person's (a) awareness that in any given situation there are options and alternatives available, (b) willingness to be flexible and adapt to the situation, and (c) self-efficacy in being flexible" (Martin & Rubin, 1995, p. 623). Martin and Rubin (1995) assert that cognitive flexibility is a necessary antecedent of behavioral flexibility in social situations. It can be hypothesized that this model can be extended to include choice of leadership style. If a leader is unaware of options for behavior, unwilling to adapt his or her behavior to fit the situation, or does not believe that he or she will be able to successfully display flexibility in behavior, then he or she will be less likely to adjust his or her leadership style to fit the situation. On the other hand, awareness of options, willingness to adapt, and belief in the ability to be flexible may make flexibility in leadership style more likely.

Using these three measures of behavioral flexibility (range of interpersonal capabilities, self-monitoring, and cognitive flexibility), the following hypothesis will be tested:

> Hypothesis 3: Measures of behavioral flexibility are significantly correlated with the tendency to use Behavioral Chameleon strategies.

In general, individuals in Quadrants 2 and 3 (high BC–low SE and high BC–high SE) are expected to have higher levels of behavioral flexibility than those in Quadrant 1 and Quadrant 4 (low BC–low SE and low BC–high SE). First, individuals who are categorized into Quadrant 2 are expected to be oriented towards changing personal

behavior rather than manipulating environments. Such an orientation is expected to be influenced by an individual's belief in his or her behavioral flexibility. Thus individuals who fall into Quadrant 2 (high BC–low SE) are expected to have higher scores on measures of behavioral flexibility. Because categorization into Quadrant 3 (high BC–high SE) is partially based on higher tendencies to use Behavioral Chameleon strategies, individuals in this quadrant are also expected to have high levels of behavioral flexibility. Individuals who fall into Quadrant 3 are expected to be highly active and oriented towards achieving environmental congruence through changing both environments and their own behavior. Thus, the following hypothesis will be tested:

> Hypothesis 4: Individuals whose tendencies to take Behavioral Chameleon and Situational Engineer strategies place them in Quadrant 2 and Quadrant 3 will have significantly higher levels of behavioral flexibility than individuals in Quadrants 1 and 4.

Proactive Personality

Proactive personality is a personality variable that appears to be particularly relevant to the Situational Engineer approach. Proactive personality refers to an individual's tendency to change his or her environment, rather than to respond passively or adapt to fit the environment (Bateman & Crant, 1993). Individuals with high levels of proactive personality are not constrained by their environment (Bateman and Crant, 1993). Such individuals tend to "challenge the status quo rather than passively adapting to present conditions" (Crant, 2000, p. 436). In organizational settings, individuals with high levels of proactive personality may achieve success through their ability to select, create, and influence their work environments (Seibert, Crant, & Kraimer, 1999).

Research indicates that this variable is related to the tendency to bring about environmental change. For example, Bateman and Crant (1993) found that proactive personality was significantly and positively correlated with self-reported achievements aimed at change and self-reported involvement in extracurricular activities that were aimed at producing constructive change. Additionally, Crant (1996) found that proactive personality was correlated with entrepreneurial intentions, which can be viewed as a form of creating environmental change. Furthermore, Finkelstein, Kulas, and Higgins (2000) found that individuals with high scores on proactive personality were also less likely to engage in referent information seeking behavior, which is information regarding others demands and expectations for the fulfillment of a role. Perhaps this reflects a greater tendency for such individuals to create their own roles, rather than searching out others needs and expectations. Thus, individuals with high levels of proactive personality appear to be oriented towards changing organizational environments and creating their own roles within organizations.

While some have hypothesized that leaders with high levels of proactive personality will be less likely to use certain leadership styles, research indicated that this is not the case. For example, Becherer and Maurer (1999) hypothesized that highly proactive presidents of small companies would delegate less than those who were low on proactive personality. However, they found no significant relationship between proactive personality and delegation. This finding is consistent with the position suggested in this dissertation that an orientation towards changing environments is conceptually distinct from any given style of leadership. As discussed in Chapter II, this dissertation suggests that a leader who tends to change the environment to fit his or her preferred leadership

style will do so, regardless of whether that style is classified as authoritarian, delegative, or participative.

The descriptions of an individual with high proactive personality, and the findings of research exploring this trait, are consistent with the Situational Engineer strategy. Therefore, it is expected that proactive personality will be related to the tendency to use Situational Engineer strategies in managerial situations. Thus, the following hypothesis will be tested:

> Hypothesis 5: Proactive personality is significantly and positively correlated with the tendency to use Situational Engineer strategies.

Individuals categorized into Quadrant 3 and 4 (high BC–high SE and low BC–high SE) are expected to have significantly higher Proactive Personality scores than individuals categorized into Quadrant 1 and Quadrant 2 (low BC–low SE and high BC–low SE). First, individuals categorized into Quadrant 4 (low BC–high SE) are expected to be oriented toward changing environments, rather than behavior. Thus, individuals in this quadrant are expected to have significantly higher levels of personality variables that are related to this orientation. Similarly, individuals who fall into Quadrant 3 (high BC–high SE) are expected to be highly active and oriented towards achieving environmental congruence through the use of both Behavioral Chameleon and Situational Engineer strategies. Individuals who are categorized into Quadrant 3 are also predicted to have relatively high levels of proactive personality. Thus, significantly higher levels of this variable should characterize both Quadrant 3 and Quadrant 4. The following specific hypothesis will be tested:

> Hypothesis 6: Individuals whose tendencies to take Behavioral Chameleon and Situational Engineer strategies

> place them in Quadrant 3 and Quadrant 4 will have significantly higher levels of proactive personality than individuals in Quadrants 1 and 2.

Machiavellianism

Another trait that may be relevant to both the Behavioral Chameleon and Situational Engineer strategies is Machiavellianism. Machiavellianism refers to the extent to which an individual is oriented towards the use of manipulation as a strategy for social influence (Christie & Geis, 1970). Christie and Geis (1970) developed an instrument to assess attitudes towards the beliefs advocated by Machiavelli. They found that individuals who scored low on the Machiavellianism scale (indicating that they did not agree with the beliefs advocated by Machiavelli) tended to be more affected by social influence, were more likely to accept and follow the structure of a given situation, and tended to meet others needs rather than ensuring that their own needs were met. This appears to be consistent with the Behavioral Chameleon approach in which the individual accepts the structure of the situation as a given and adjusts his or her behavior to environmental demands, rather than attempting to make the environment match his or her needs or preferences.

In contrast, Christie and Geis (1970) report that individuals with high scores on this scale (indicating general agreement with the beliefs advocated by Machiavelli) tend to initiate and control the structure of their environments and to resist social influence. Although individuals who score high on this scale are aware of the needs of others, they tend to use this information to their advantage, rather than attempting to adjust to meet others' needs. This appears to be consistent with the Situational Engineer approach,

which is focused on making environments meet personal preferences, rather than adjusting personal behavior to meet the demands of the environment.

Thus, the following hypothesis will be tested:

> Hypothesis 7: Scores on the Machiavellianism scale will be significantly and negatively correlated with the tendency to use Behavioral Chameleon strategies and significantly and positively correlated with the tendency to use Situational Engineer strategies.

Individuals categorized into Quadrant 4 (low BC–high SE) are expected to be oriented toward changing environments, rather than behavior. It is expected that Machiavellianism will be positively associated with this tendency. In contrast, individuals in Quadrant 2 (high BC–low SE) are expected to be oriented towards changing their behavior, rather than environments. It is expected that Machiavellianism will be negatively associated with this tendency. Thus the following specific hypothesis will be tested:

> Hypothesis 8: Individuals whose tendencies to take Behavioral Chameleon and Situational Engineer strategies place them in Quadrant 4 will have significantly higher scores on Machiavellianism than individuals in Quadrant 2.

Summary

In summary, this dissertation explores the constructs of Behavioral Chameleon and Situational Engineer strategies in leadership situations through tests of relationships of individual difference variables to these strategies and tests of differences in personality of individuals categorized into quadrants by the combination of these strategies. The tendency to use the Behavioral Chameleon strategy is expected to be related to an internal locus of control, high levels of behavioral flexibility, and low levels of Machiavellianism. The tendency to use the Situational Engineer approach is expected to related to an

internal locus of control, high levels of proactive personality, and high levels Machiavellianism. *Figure 2* below contains a summary of the expected patterns of personality variables for each quadrant.

Figure 2
Four-Quadrant Model & Expected Personality Patterns

Likelihood of using Behavioral Chameleon (BC) Strategies		Low	High
	High	**Quadrant 2: high BC–low SE** Internal locus of control, Low proactive Personality, Low Machiavellianism, High behavioral flexibility.	**Quadrant 3: high BC–high SE** Internal locus of control, High proactive personality, High behavioral flexibility
	Low	**Quadrant 1: low BC–low SE** External locus of control, Low proactive personality, Low behavioral flexibility	**Quadrant 4: low BC–high SE** Internal locus of control, High proactive personality, High Machiavellianism, Low behavioral flexibility

Likelihood of using Situational Engineer (SE) Strategies

CHAPTER IV: METHOD

This dissertation research tests hypothesized relationships between individual difference variables and the use of Behavioral Chameleon and Situational Engineer strategies. Chapter IV discusses the methodology used in the research, including the participants, instruments, procedures, and ethical considerations.

Method

Participants

The study included 167 participants (68% female, 32% male) from a mixture of different backgrounds. Participants included 59 managers from a variety of county government organizations in the Eastern United States who volunteered to participate in the study following their attendance at a leadership development conference. The sample also included 108 students, consisting of 32 MBA students and 76 undergraduates (primarily business majors) from a large urban university located in the Eastern U. S. All student participants were enrolled in Industrial and Organizational Psychology courses, and completed the instruments as part of a classroom exercise. Only students who agreed to have their responses used for research purposes were included in the sample.

On average, participants reported 4.4 years of managerial experience and 10.9 years of work experience. Eighty-six participants (51.5%) reported at least one year of managerial experience. Participants reporting some managerial experience had, on average, 8.0 years of managerial experience and 16.4 years of work experience. An additional nine (5.4%) participants were known to have managerial experience because they were part of the managerial sample, but they did not respond to the question regarding the number of years of managerial and work experience. Seventy-two participants (43.1%) reported no managerial experience, but reported an average of 4.1

years of work experience.

Instruments

Locus of Control

Locus of Control was measured using Spector's (1988) Work Locus of Control Scale (WLCS), which is specifically designed to assess this construct within work settings. The scale consists of 16 statements to which participants respond on a six point Likert type scale anchored by 'disagree very much' and 'agree very much.' Eight items are reverse scored. Sample items include: "Most employees have more influence on their supervisors than they think they do" and "A job is what you make of it." Internal locus of control is indicated by low scores on the scale, whereas external Locus of Control is indicated by high scores. Reported reliabilities for this scale range from .75 to .85. Spector (1988) reports that, at least in a student sample, this scale was not significantly correlated with socially desirable responding.

Behavioral Flexibility

Behavioral flexibility was measured using three instruments: Revised Self-monitoring Scale, Battery of Interpersonal Capabilities, and Cognitive Flexibility Scale.

Self-monitoring. Lennox and Wolfe's (1984) Revised Self-monitoring Scale was used as a measure of the self-monitoring construct. Lennox and Wolfe's (1984) scale consists of 13 items scored on a six-point scale ranging from (1) "certainly, always false" to (6) "certainly, always true." Sample items include, "In social situations, I have the ability to alter my behavior if I feel that something else is called for" and "I have found that I can adjust my behavior to meet the requirements of any situation I find myself in." Two items are reverse scored. High scores on the scale indicate a high level of self-

monitoring, low scores indicate a low level of self-monitoring. Lennox and Wolfe (1984) report a coefficient alpha for the self-monitoring scale of .75.

Range of interpersonal capabilities. Paulhus and Martin's (1987) Battery of Interpersonal Capabilities (BIC) was also used as a measure of behavioral flexibility. The BIC measures flexibility in behaviors categorized as dominant, ambitious, extraverted, gregarious, agreeable, warm, trusting, unassuming, submissive, lazy, introverted, aloof, quarrelsome, cold, calculating, and arrogant. For each attribute, subjects are asked a direct capability question, such as "How capable are you of being dominant when the situation requires it?" Three additional questions are asked to assess (a) the difficulty of performing each behavior, (b) anxiety when performing each behavior, and (c) the tendency to avoid situations demanding such behavior. Responses to all questions are rated on seven-point Likert scales anchored by *very much* (7) and *not at all* (1) (Paulhus & Martin, 1988). Individuals receive a score for each question. The scores for the different questions can be interpreted as global capability, difficulty, anxiety, and avoidance. High scores on the global capability indicate a wide range of interpersonal capabilities. High scores on the other three scales indicate a lesser degree of behavioral flexibility. Thus, the most flexible individual would have high scores on global capability and low scores on difficulty, anxiety, and avoidance.

Cognitive flexibility. Cognitive flexibility was measured using Martin and Rubin's (1995) Cognitive Flexibility Scale, which is designed to measure awareness of alternatives, willingness to adapt to situations, and belief in one's ability to be flexible. This is a 12-item scale with a 6-point Likert type response format anchored by (6) "Strongly Agree" and (1) "Strongly Disagree." Examples of items include "I have many

possible ways of behaving in any given situation," and "I am willing to listen and consider alternatives for handling a problem." High scores on this instrument indicate a greater degree of cognitive flexibility. Martin and Rubin (1995) report a coefficient alpha of .76 and a Pearson test-retest correlation of .83.

Proactive Personality

This study used Seibert, Crant, and Kraimer's (1999) shortened version of Bateman and Crant's (1993) Proactive Personality Scale. This scale consists of 10 items such as "I love being a champion for my ideas, even against others' opposition" and "No matter what the odds, if I believe in something I will make it happen." Subjects indicate on a 7-point Likert scale the extent to which they agree or disagree that items are reflective of their behavior. Scores are calculated by averaging item responses. Higher scores on the scale indicate a greater degree of proactive personality. Seibert, Crant, and Kraimer (1999) report a coefficient alpha of .86 for this scale.

Machiavellianism

Machiavellianism was measured using Christie and Geis's (1970) Likert type Mach IV Scale. This is a 20 item scale consisting of items such as "Anyone who completely trusts anyone else is asking for trouble" and "Never tell anyone the real reason you did something unless it is useful to do so." Responses are made on a seven-point Likert type scale anchored by "strongly disagree" and "strongly agree." Half of the items were reverse scored. High scores on the scale indicate high Machiavellianism. A constant of 20 is added to all scores so that the maximum an individual can score is 160, and 100 is the theoretical midpoint between high and low Machiavellianism. Christie and Geis (1970) report a reliability of .79 for the Mach IV scale. For this research, Christie

and Geis's (1970) use of the word 'men' in several items is replaced by the more general word 'people' in order to avoid potential offense or bias in reading and answering these items.

Managerial Decision Making Task

Participants engaged in a written decision making task in order to explore their tendency to use Behavioral Chameleon and Situational Engineer strategies. This exercise was a scenario based decision making task that asks participants to read descriptions of managerial situations and to indicate how likely they would be to take several actions listed after each situation (See Appendix).

The exercise consists of nine scenarios, with each scenario followed by a list of potential behaviors that could be used in response to the situation presented in the scenario. These behaviors either involved adjusting leader behavior to fit the environment (Behavioral Chameleon), or adjusting the environment to fit leader behavior (Situational Engineer). Behavioral Chameleon strategies involve changing personal behavior and leadership style (e.g., adjusting level of participation in decision making to meet the desires of subordinates, seeking information on norms and adjusting behavior accordingly, analyzing situations to see what management style is most appropriate). Situational Engineer items involve changing environmental factors (e.g., adjusting task assignments, transferring or firing problem employees, adjusting performance appraisal and reward systems). Following each scenario, participants are presented with a list of actions. A total of 57 responses were generated and divided up among different scenarios. The number of responses available for any given scenario ranges from four to eight. Participants are asked to indicate on a five-point scale, anchored by (1) 'Very

Unlikely' and (5)'Very Likely,' the likelihood that they will use each approach from the list. Responses to the exercise are summed to create two separate components: one designed to measure the tendency change leadership style to fit the situation (Behavioral Chameleon) and the other to measure the tendency change the environment to fit leadership style (Situational Engineer). High scores indicate a high likelihood of using the strategies contained in each component. Thus, the task was designed to elicit self-reports of the likelihood that individuals would use Behavioral Chameleon and Situational Engineer strategies in a leadership context.

This exercise was developed through pilot studies aimed at producing a decision making task with adequate levels of internal reliability for both components. Participants in the initial pilot study were 102 employees of a state law-enforcement organization in the Eastern United States. In order to maximize the homogeneity of the scales, the internal reliability of each scale was examined separately and items with low item-total correlations were deleted. Items were dropped if they had an item-total correlation of less than .20, or if the elimination of the item would increase the reliability of the scale. The resulting Behavioral Chameleon component had an Alpha coefficient of .77. The Situational Engineer scale had an Alpha coefficient of .81.

A follow-up study was conducted to explore whether the reliabilities observed in the initial pilot study would generalize to another sample. The sample in the second pilot study consisted of 106 students, including 68 MBA students from a variety of schools who were applying to managerial positions in a large telecommunications company with headquarters located in the Eastern United States, 20 MBA students from a large urban university located in the Eastern U. S., and 18 Undergraduates (primarily business

majors) from the same university. In this replication, the alpha coefficient was .70 for the Behavioral Chameleon scale and .72 for the Situational Engineer scale. Although the reliability was lower for this sample, the task still elicited adequate levels of reliability.

Together, these studies resulted in the version of the managerial decision making task used in the current study, which consisted of a 13-item Behavioral Chameleon component, and a 24-item Situational Engineer component. In the current research, analyses were conducted using these previously identified 13 and 24 item scales. However, the additional 20 items contained in the decision making task were administered for experimental purposes.

In addition to the generation of raw scores indicating the tendency to use the two strategies, participants were classified into four quadrants (see *Figure 1*, p. 43) on the basis of their responses to both components of the decision making task. Participants were classified into the four quadrants based on a median split of scores on the Behavioral Chameleon and Situational Engineer components. Those who scored below the median on both components were classified into Quadrant 1. Quadrant 2 consisted of individuals who scored above the median on the Behavioral Chameleon component and below the median on the Situational Engineer component. Individuals who scored above the median on both components were classified into Quadrant 3. Quadrant 4 contained those individuals who scored below the median on the Behavioral Chameleon component but above the median on the Situational Engineer component.

Procedures

Non-student participants completed a computer-based version of the instrument and returned their responses by electronic mail. Student participants completed a paper-

and-pencil version of the instrument, which was identical in format to the computer-based version. All participants (n = 167) completed the decision making task, but due to time constraints, not all participants completed each personality scale. A total of 133 participants completed the self-monitoring and proactive personality scales, 124 completed the cognitive flexibility and Mach IV scales, 126 completed the WLCS scale, 122 participants completed the global capability and difficulty scales of the BIC, and 120 completed the anxiety and avoidance scales of the BIC.

Informed Consent and Ethical Considerations

In general, this research raised no special ethical concerns. The research consisted of administering questionnaire instruments and a decision making exercise to voluntary managerial and student participants. Participants were informed that the survey was not an intelligence test or a test of their managerial skills, so data collection was unlikely to cause stress or anxiety beyond that which would normally be experienced in work or school settings. In addition, no deception was used in the experiment. Survey responses did not have the potential to reveal medical conditions or other troubling conditions.

Participants were informed that they were participating in a study on personality and decision making. All participants received notice of their rights as a participant. Following completion of the instruments, all participants received a summary of the concepts investigated in the study and received feedback on how their responses to the managerial decision making task compared to the average responses of individuals who had previously completed the instrument. Data were coded confidentially and survey forms were stored in a secure location available only to the investigator.

Institutional consent was obtained from the organization that employed all non-student participants. Participants received an information sheet informing them that their participation was completely voluntary, that their supervisor would be unaware of their decision whether or not to participate, and that their participation would not have any affect on their employment or evaluation.

Informed consent was obtained from all student participants. Only students who signed informed consent forms were included in the study. Student participants were informed that their participation would not affect their grades, that there was no penalty for non-participation, and that their professor would be unaware of their decision of whether or not their results could be used for research purposes. All students received feedback on their response, regardless of whether or not they agreed that the results could be used for research purposes.

CHAPTER V: RESULTS

Chapter V reports the results of the empirical study. First, some general results are presented, which describe the participants in the study and their responses to the decision making task and personality instruments. Next, the results of the hypothesis tests are presented. Hypotheses were primarily tested through a series of correlation and analysis of variance (ANOVA) tests. A secondary analysis, which consisted of a multiple analysis of variance (MANOVA) and follow-up univariate ANOVAs, was also used to test hypotheses regarding the four-quadrant model. Analyses were conducted both with the overall sample of participants and with a subgroup including only those participants with managerial experience. The chapter concludes with a summary of results.

Results

Prior to conducting the hypothesis tests, analyses were conducted on the sample to determine if there were any significant differences in responses for individuals with managerial experience ($n = 95$) and those without managerial experience ($n = 72$).

Differences between Managerial and Non-managerial Participants

Individuals with managerial experience had significantly lower scores on both components of the managerial decision making task (Behavioral Chameleon component, $t\,(165) = -5.07, p < .01, d = .79$; Situational Engineer, $t\,(165) = -3.54, p < .01, d = .55$). Thus, responses from individuals with managerial experience indicated that they were significantly less likely than non-managers to use the Behavioral Chameleon and Situational Engineer strategies presented in the decision making exercise. Although no hypotheses were generated regarding the relationship between managerial experience and

the components of the decision making exercise, these results were unexpected, and potential explanations for this finding are discussed in the next chapter.

Individuals with managerial experience also differed significantly from the non-managerial participants on several individual difference variables. Those with managerial experience had significantly higher levels of cognitive flexibility (t (122) =4.24, $p < .01$, $d = .77$) and had scores on the Work Locus of Control Scale indicating significantly more internal locus of control than non-managers (t (124) =-5.03, $p < .01$, $d = .90$). Those with managerial experience also had significantly lower levels of Machiavellianism than those with no managerial experience (t (122) = -4.22, $p < .01$, $d = .76$). In summary, individuals in the managerial subgroup had higher levels of cognitive flexibility, lower levels of Machiavellianism, and a more internal locus of control than individuals with no managerial experience.

Because of the significant differences in responses between managers and non-managers, all hypothesis tests were conducted both on the total sample ($n = 167$) and on a subgroup that included only those participants with managerial experience ($n = 95$). This subgroup included all participants from the managerial sample, as well as all students (MBA and undergraduate) who reported at least one year of managerial experience. While 95 participants in the study had managerial experience, it should be noted that the sample sizes for correlation analyses on the managerial sample ranged from $n = 34$ to $n = 95$, because not all participants completed all instruments in the study.

Descriptive Statistics and Correlation Matrices

Table 1 below presents the means, standard deviations, sample sizes, and intercorrelations among the study variables for the entire sample. *Table 2* presents the

same information for the managerial subgroup.

Table 1

All Participants: Means, Standard Deviations, Sample Sizes, and Intercorrelations Among Study Variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Behavioral Chameleon	35.7 n=167	6.1										
2. Situational Engineer	81.9 n=167	10.1	.66** n=167									
3. Work locus of control	41.9 n=126	9.6	.28** n=126	.24** n=126								
4. Self-monitoring	56.0 n=133	6.7	.05 n=133	.13 n=133	-.09 n=108							
5. BIC global capability	75.6 n=122	13.7	.01 n=122	.05 n=122	-.03 n=122	.32** n=104						
6. BIC difficulty	50.7 n=122	12.8	-.06 n=122	.00 n=122	.04 n=122	.-.30** n=104	-.48** n=120					
7. BIC anxiety	49.6 n=120	14.5	-.12 n=120	-.05 n=120	-.09 n=120	-.38** n=102	-.18 n=120	.57** n=120				
8. BIC avoidance	53.7 n=120	13.1	-.24** n=120	-.12 n=120	-.08 n=120	-.27** n=102	-.19* n=120	.51** n=120	.71** n=120			
9. Cognitive flexibility	56.6 n=124	6.7	-.30** n=124	-.18 n=124	-.27** n=108	.60** n=108	.32** n=104	-.31** n=104	-.18* n=102	-.13 n=102		
10. Proactive personality	5.2 n=133	.78	.12 n=133	.23** n=133	-.20* n=108	.58** n=133	.26** n=104	.-.14 n=104	-.26** n=102	-.29** n=102	.56** n=108	
11. Machiavellianism	92.3 n=124	14.2	.30** n=124	.43** n=124	.44** n=108	.03 n=108	.18 n=104	-.01 n=104	-.18 n=102	-.09 n=102	-.22** n=124	-.06 n=108

Note: *Correlation is significant at the 0.05 level.

** Correlation is significant at the 0.01 level.

Table 2
Managerial Subgroup: Means, Standard Deviations, Sample Sizes, and Intercorrelations Among Study Variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Behavioral Chameleon	33.7 n=95	5.9										
2. Situational Engineer	79.6 n=95	10.3	.66** n=95									
3. Work locus of control	37.4 n=54	9.5	.31** n=54	.38** n=54								
4. Self-monitoring	55.6 n=61	7.0	.25* n=61	.19 n=61	.10 n=36							
5. BIC global capability	76.6 n=54	14.2	.12 n=54	.11 n=54	.09 n=54	.44** n=36						
6. BIC difficulty	50.2 n=54	14.0	-.24 n=54	-.10 n=54	-.11 n=54	-.33 n=36	-.32* n=54					
7. BIC anxiety	51.9 n=52	15.9	-.32* n=52	-.13 n=52	-.16 n=52	-.44** n=34	-.22 n=52	.77** n=52				
8. BIC avoidance	55.1 n=52	14.3	-.33** n=52	-.11 n=52	-.30* n=52	-.47** n=34	-.27 n=52	.70** n=52	.78** n=52			
9. Cognitive flexibility	59.4 n=52	5.8	.03 n=52	-.09 n=52	-.17 n=36	.38* n=36	.49** n=36	-.34* n=36	-.23 n=34	-.23 n=34		
10. Proactive personality	5.2 n=61	.86	.28* n=61	.35** n=61	-.07 n=36	.65** n=61	.39* n=36	-.26 n=36	-.31 n=34	-.40* n=34	.55** n=36	
11. Machiavellianism	86.4 n=52	14.9	.28** n=52	.49** n=52	.38* n=36	.28 n=36	.37* n=36	-.20 n=36	-.33 n=34	-.30 n=34	-.07 n=52	.05 n=36

Note: *Correlation is significant at the 0.05 level.
** Correlation is significant at the 0.01 level.

In examining the descriptive statistics, several observations about participants' responses were noted. First, it appears that both the overall sample and the managerial subgroup tended to assign higher likelihood ratings to Situational Engineer items than Behavioral Chameleon items. The 24-items of the Situational Engineer component were rated on a five-point scale, and thus had a total possible score of 120. The observed mean scores represent an average likelihood rating of 3.3 (managerial subgroup) to 3.4 (overall sample) for each Situational Engineer item. The 13-items of the Behavioral Chameleon component were also rated on a five-point scale, and thus had a total possible score of 65. The mean scores on this component represent an average likelihood rating of 2.6 (managerial subgroup) to 2.7 (overall sample) for each Behavioral Chameleon item. Thus, participants reported that they would be more likely to use the Situational Engineer strategies contained in the decision making exercise.

A second observation is that, on average, participants in the sample had a slight tendency to disagree with Machiavellian statements. As discussed earlier, the theoretical midpoint of the Machiavellianism scale is 100, with scores above this point indicating greater agreement with Machiavellian statements and scores below this point indicating lesser agreement with Machiavellian statements (Christie & Geis, 1970). According to Christie and Geis (1970), a score of 80 indicates an individual with a tendency to slightly disagree with Machiavellian items, and a score of 100 indicates an individual with neutral judgment of Machiavellian items. Mean scores for both the overall sample, as well as scores for the managerial subgroup, fell within this 'Slightly Disagree' to 'Neutral' range, indicating that, on average, the participants in this study had a slight tendency to disagree with Machiavellian items.

Response to the Decision Making Exercise and Classification into Quadrants

For the Behavioral Chameleon component of the exercise, the mean score on the 13-item scale was 35.7, with a median of 36, and a standard deviation of 6.1. Scores ranged from a minimum of 19 to a maximum of 54. A reliability analysis for this component indicated a coefficient alpha of .64. This was unexpectedly low, as prior pilot studies indicated coefficient alphas of between .70 and .77.

For the 24-item Situational Engineer component, the mean score was 81.9, with a median of 82, and a standard deviation of 10.1. The minimum score on this component was 56, and the maximum score was 105. A reliability analysis indicated a .77 coefficient alpha. This finding replicated the results of prior pilot studies, which indicated coefficient alphas of between .72 and .81.

Because of the low reliability for the Behavioral Chameleon component, additional reliability analyses were conducted to explore whether reliabilities of the components of the decision making task were higher for individuals with prior managerial experience. For the Behavioral Chameleon component, the reliability analysis indicated a coefficient alpha of .59 for those individuals with no managerial experience, and .59 for those individuals who reported prior managerial experience. Therefore, the reliability of this component did not differ based on prior experience as a manager. For the Situational Engineer component, the reliability analysis indicated a coefficient alpha of .73 for participants with no managerial experience, and .77 for participants who reported prior managerial experience. Therefore, the reliability of this component was slightly higher for individuals who had prior experience as a manager.

There were no significant differences in the responses of males and females to the

managerial decision making task (Behavioral Chameleon component, t (165), = .05, *ns*, d = .01 ; Situational Engineer component, t (165), = 1.37, *n*, d = .21).

A median split on responses to both components of the decision making exercise was used to classify participants into the four quadrants created by combinations of Behavioral Chameleon (BC) and Situational Engineer (SE) strategies. Fourteen participants were excluded from all analyses related to the quadrants because their scores on at least one of the components fell exactly on the median score for that component. Of the remaining 153 participants who were classified into a quadrant, 54 (36.6%) had scores that placed them in Quadrant 1 (low BC–low SE), 18 (11.8%) were in Quadrant 2 (high BC–low SE), 56 (36.6%) were in Quadrant 3 (high BC–high SE), and 23 (15%) were in Quadrant 4 (low BC–high SE).

Relationship between Tendency to Change Environments and Tendency to Change Behavior

Results indicated a strong relationship between the Behavioral Chameleon and Situational Engineer components of the decision making exercise (r = .66, p < .01). In other words, individuals who reported that they would be likely to take actions aimed at changing leadership behavior to fit the environment also reported that they would be likely to take actions aimed at changing the environment to fit preferred behaviors.

A similar relationship was observed between proactive personality and measures of behavioral flexibility. Proactive personality was significantly correlated with all but one of the measures of behavioral flexibility used in this study (self-monitoring r = .58, p < .01; cognitive flexibility, r = .56, p < .01; BIC global capability, r = .26, p < .01; BIC difficulty, r = -.14, *ns*; BIC anxiety, r = -.26, p < .01, BIC avoidance, r = -.29, p < .01).

Note that high scores on the BIC global capability and BIC difficulty scales indicate greater behavioral flexibility, whereas low scores on the BIC anxiety and BIC avoidance scales indicate higher levels of flexibility.

Therefore, the significant correlations between Behavioral Chameleon and Situational Engineer components, as well as significant correlations between proactive personality and behavioral flexibility measures, indicated that individuals who have an orientation towards changing their environment also have the tendency to adjust behavior to fit the environment.

Hypothesis Tests

Hypotheses regarding relationships between individual difference variables and specific components of the decision making exercise (Hypotheses 1, 3, 5, and 7) were tested through correlation analysis. Hypotheses regarding levels of individual difference variables by quadrant (Hypotheses 2, 4, 6, and 8) were primarily tested through Analysis of Variance (ANOVA). Initial ANOVA tests consisted of an overall test of differences in group means along with *a priori* contrasts corresponding to the hypotheses. If the overall *F* test was significant, then a Scheffé test, which is a conservative *post hoc* test, was used to further explore significant differences in group means. In addition, a secondary analysis, which consisted of a multiple analysis of variance (MANOVA) and follow-up ANOVAs, was also used to test Hypotheses 2, 4, 6, and 8. Throughout the results section, judgments regarding the magnitude of effect size follow Cohen's (1988) suggestions for "small," "medium," and "large" effect sizes. The chapter concludes with a summary of results.

Hypothesis 1: Locus of Control

Scores on the Work Locus of Control Scale were expected to be significantly and negatively correlated with scores on the Behavioral Chameleon and Situational Engineer components of the managerial decision making exercise. Within the overall sample, Hypothesis 1 was not supported. The results were significant for both components, but in the opposite direction as predicted. The correlation between the Work Locus of Control Scale and the Behavioral Chameleon component was $r = .28, p < .01$. The correlation between the Work Locus of Control Scale and the Situational Engineer component was $r = .24, p < .01$. Thus, on both components, participants with higher scores tended to have a more external work locus of control. The results indicated a medium effect size for the correlation between locus of control and the two components of the decision making exercise.

Similarly, Hypothesis 1 was not supported within the managerial subgroup. There was a significant relationship between the Work Locus of Control Scale and the Behavioral Chameleon ($r = .31, p < .05$) component, as well as the Situational Engineer component ($r = .38, p < .01$), but the relationships were in the opposite direction as predicted. Again, the results indicated that individuals with a more internal locus of control reported a lower likelihood of taking strategies aimed at changing the environment, as well as strategies aimed at changing leadership behavior.

It appears that, within both the overall sample and the managerial subgroup, individuals who have a stronger belief that they are able to have an impact on outcomes tended to report a lower likelihood of using the strategies listed in the managerial decision making exercise.

Hypothesis 2: Locus of Control Scores by Quadrant

Individuals in Quadrant 1 (low BC–low SE) were expected to have significantly higher work locus of control scores, which would indicate a more external locus of control, than individuals in Quadrant 2 (high BC–low SE), Quadrant 3 (high BC–high SE), and Quadrant 4 (low BC–high SE). Hypothesis 2 was not supported within the overall sample. An analysis of variance indicated that there were significant differences in work locus of control scores between the four quadrants (F (3, 112) = 3.07, $p < .05$, eta-squared = .08). The eta-squared indicated a medium effect size. However, an *a priori* analysis contrasting Quadrant 1 and Quadrants 2, 3, and 4 combined showed that individuals in Quadrant 1 had significantly lower locus of control scores, indicating a more internal work locus of control than individuals in Quadrants 2, 3, and 4 (t (112) = -2.83, $p < .05$, $d = .53$). In other words, a significant difference was found between the quadrants that were expected to differ on this trait, but the difference was in the opposite direction as was predicted. A *post hoc* Scheffé test indicated that no individual pairwise comparisons between quadrant means were significant.

Similar results were found for the managerial subgroup. An analysis of variance indicated that there were significant differences on work locus of control scores between the four quadrants (F (3, 44) = 4.21, $p < .05$, eta-squared = .22). The results indicated a large effect size. Again, a significant difference was found between the quadrants that were expected to differ on this trait, but the difference was in the opposite direction as was predicted. The *a priori* contrast between Quadrant 1 (low BC–low SE) and Quadrants 2, 3, and 4 (high BC–low SE, high BC–high SE, and low BC–high SE) combined indicated that participants in Quadrant 1 had scores signifying a more internal

work locus of control than individuals in the other quadrants (t (44) =3.17, $p < .05$, d = .95). A *post hoc* Scheffé test indicated that the mean work locus of control scores for participants in Quadrant 3 (high BC–high SE) was significantly higher than for individuals in Quadrant 1 (low BC–low SE), but did not indicate any other significant pairwise comparisons between quadrant means. Thus, individuals in the 'low Behavioral Chameleon – low Situational Engineer' quadrant had a significantly more internal locus of control than individuals in the 'high Behavioral Chameleon – high Situational Engineer' quadrant.

In summary, within both the overall sample and the managerial subgroup, individuals who reported a low likelihood of using both Behavioral Chameleon and Situational Engineer strategies also tended to have a more internal locus of control when compared to individuals who reported a greater likelihood of using these strategies.

Hypothesis 3: Behavioral Flexibility

Hypothesis 3 predicted that measures of behavioral flexibility would be significantly and positively related to scores on the Behavioral Chameleon component of the exercise. This hypothesis was tested using three different measures of behavioral flexibility (self-monitoring, range of interpersonal capabilities, and cognitive flexibility).

Self-monitoring. Behavioral flexibility, as measured by self-monitoring, was expected to be significantly and positively correlated with scores on the Behavioral Chameleon component. Within the overall sample, Hypothesis 3 was not supported. Self-monitoring was not significantly correlated with the Behavioral Chameleon component ($r = .05$, *ns*). Thus, the results indicated that, in the overall sample, self-monitoring was not related to the tendency to change leader behavior to fit the

environment.

In contrast, Hypothesis 3 was supported within the managerial subgroup. As predicted, the self-monitoring scale was significantly and positively correlated with the Behavioral Chameleon component of the decision making task ($r = .25, p < .05$). In other words, individuals who reported that they would be likely to use strategies aimed at changing leadership behaviors to fit the environment also tended be those who use situational cues to guide their behavior, are able to accurately choose appropriate behaviors, and are good at diagnosing social situations. Thus, within the managerial subgroup, the results for self-monitoring supported the hypothesis that individuals with higher levels of behavioral flexibility would report a greater likelihood of using Behavioral Chameleon strategies to leadership environments. In contrast to the small effect size found within the overall sample, the results for the managerial subgroup indicated a medium effect size for the relationship between self-monitoring and the Behavioral Chameleon component.

Range of interpersonal capabilities. The scales of the BIC, which use range of interpersonal capabilities as measures of behavioral flexibility, were expected to be significantly correlated with scores on the Behavioral Chameleon component. According to this construct, behavioral flexibility is represented by high scores on the global capability scale, and low score on the difficulty, anxiety, and avoidance scales. It was predicted that the global capability scale would be positively correlated with scores on the Behavioral Chameleon component, whereas the difficulty, anxiety, and avoidance scales would be negatively correlated with this component. The Battery of Interpersonal Capabilities provided mixed support for Hypothesis 3 within the overall sample. Scores

on the BIC avoidance scale were significantly correlated with the Behavioral Chameleon component of the exercise ($r = -.24, p < .01$), with the results indicating a medium effect size. Thus, individuals with high scores on this component reported a significantly lower tendency to avoid situations in which they would have to display a range of interpersonal behaviors. Relationships between the Behavioral Chameleon component and the other BIC scales were not significant and the results indicated small effect sizes (global capability difficulty, $r = .01$, *ns*; $r = -.06$, *ns*; anxiety, $r = -.12$, *ns*).

Within the managerial sample, the relationship between behavioral flexibility and the Behavioral Chameleon component was partially supported. While the BIC global capability and difficulty scales were not significantly correlated with the Behavioral Chameleon component (global capability, $r = .12$, *ns*, difficulty, $r = -.24$, *ns*), the other two scales of the BIC exhibited substantial correlations with this component (anxiety, $r = -.32, p < .05$; avoidance, $r = -.33, p < .01$. Thus, in comparison to those with low scores on the Behavioral Chameleon component, managers with high scores tended to experienced less anxiety when displaying a wide range of positive and negative interpersonal behaviors and were significantly less likely to avoid situations in which they would have to display a wide range of behaviors.

Thus, the hypothesis that individuals with higher levels of behavioral flexibility, as measured by the BIC, would report a significantly greater likelihood of using Behavioral Chameleon strategies was partially supported within both the overall sample and the managerial subgroup. This hypothesis received more support within the managerial subgroup. Overall, the results indicated small to medium effects for the relationship between the Behavioral Chameleon component and the scales of the BIC,

with the results for the managerial subgroup indicating larger effect sizes than the overall sample.

Cognitive flexibility. Behavioral flexibility, as measured by cognitive flexibility, was expected to be significantly and positively correlated with scores on the Behavioral Chameleon component. Contrary to expectations, there was a significant (medium effect size) negative relationship between the cognitive flexibility measure and the Behavioral Chameleon component of the decision making task ($r = -.30, p < .01$) within the overall sample. Therefore, the results indicated that individuals who had greater levels of cognitive flexibility reported a lesser likelihood of using Behavioral Chameleon strategies.

However, this finding was not repeated within the managerial subgroup. Within this sample there was no relationship between cognitive flexibility and the Behavioral Chameleon component ($r = .03$, *ns*).

Thus, Hypothesis 3 was not supported in either the overall sample or the managerial subgroup when cognitive flexibility was used as a measure of behavioral flexibility. Within the overall sample, this measure of behavioral flexibility produced counterintuitive results, whereas no relationship was found between cognitive flexibility and the Behavioral Chameleon component within the managerial subgroup.

Summary. Hypothesis 3 received mixed results from the different measures of behavioral flexibility and the different groups for which analyses were conducted. Within the overall sample, Hypothesis 3 received only partial support when range of interpersonal capabilities was used as a measure of behavioral flexibility. Hypothesis 3 received more substantial support among the managerial subgroup when self-monitoring

and range of interpersonal capabilities were used as a measure of behavioral flexibility. Within the managerial subgroup, individuals with high scores on the Behavioral Chameleon component tended to have higher levels of self-monitoring, experienced less anxiety when displaying a wide range of interpersonal behaviors, and were significantly less likely to avoid situations in which they would have to display a wide range of behaviors. However, Hypothesis 3 received no support from either the overall sample or the managerial subgroup when cognitive flexibility was used as a measure of behavioral flexibility.

Hypothesis 4: Behavioral Flexibility Scores by Quadrant

Individuals in Quadrant 2 (high BC–low SE) and Quadrant 3 (high BC–high SE) were expected to have significantly higher levels of behavioral flexibility than individuals in Quadrant 1 (low BC–low SE) and Quadrant 4 (low BC–high SE). This hypothesis was tested using three different measures of behavioral flexibility (self-monitoring, range of interpersonal capabilities, and cognitive flexibility).

Self-monitoring. It was predicted that individuals in Quadrant 2 (high BC–low SE) and Quadrant 3 (high BC–high SE) would have significantly higher self-monitoring scores than those in Quadrant 1 (low BC–low SE) and Quadrant 4 (low BC–high SE). Within the overall sample this hypothesis was not supported. An Analysis of Variance indicated no significant differences in self-monitoring scores between the various quadrants (F (3, 118) = 2.04, *ns*, eta-squared = .05). In other words, within the overall sample, participants' scores on self-monitoring did not differ significantly between quadrants. However, the results also indicated a medium effect size for the analysis.

In contrast, the ANOVA for the managerial subgroup indicated significant

differences in self-monitoring scores between the various quadrants (F (3, 50) = 3.91, $p <$ .05, eta-squared = .19), and the results indicated a large effect size. However, *a priori* contrasts testing the specific hypothesis comparing Quadrants 2 and 3 (high BC–low SE and high BC–high SE) combined and Quadrants 1 and 4 (low BC–low SE and low BC–high SE) combined indicated no significant differences (t (50) = 1.24, *ns*, d = .35). While non-significant, the results indicated a small to medium effect size for this contrast. A *post hoc* Scheffé test indicated that the mean self-monitoring scores for participants in Quadrant 3 (high BC–high SE) were significantly higher than for individuals in Quadrant 4 (low BC–high SE). Therefore, individuals who reported a greater likelihood of using both Behavioral Chameleon and Situational Engineer strategies had higher levels of self-monitoring than those who primarily relied on Situational Engineer strategies. However, no other significant pairwise comparisons between quadrants were found. Thus, the prediction that individuals in Quadrant 3 (high BC–high SE) would have higher levels of self-monitoring than individuals in Quadrant 1 (low BC–low SE) was not supported. Furthermore, the predicted differences between Quadrant 2 (high BC–low SE) compared to Quadrants 1 and 4 (low BC–low SE and low BC–high SE) were not supported. Individuals who tended to rely on Behavioral Chameleon strategies did not have significantly higher levels of self-monitoring than individuals with low tendencies to use both strategies and individuals who primarily relied upon Situational Engineer strategies. Thus, Hypothesis 4 received only partial support within the managerial sample when self-monitoring was used as a measure of behavioral flexibility. Again, the effect sizes for the overall F tests were substantially larger within the managerial subgroup.

Range of interpersonal capabilities. It was predicted that individuals in Quadrants

2 and 3 (high BC–low SE and high BC–high SE), compared to those in Quadrants 1 and 4 (low BC–low SE and low BC–high SE), would have significantly higher global capability scores, and significantly lower difficulty, anxiety, and avoidance scores. These predicted differences were not supported. Within the overall sample, ANOVAs indicated no significant differences by quadrant for the BIC scales (global capability, F (3, 108) = .24, *ns* ,eta-squared = .01; difficulty, F (3, 108) = 1.72, *ns*, eta-squared = .05; anxiety, F (3, 106) = .12, *ns*, eta-squared = .00; avoidance, F (3, 106) = 1.82, *ns*, eta-squared = .05). Thus, hypothesis 4 was not supported within the overall sample. The results indicated small to medium effect sizes.

These results were repeated within the managerial sample. Analyses of Variance indicated no significant differences in scores on the BIC scales by quadrant (global capability, F (3, 44) = 1.30, *ns*, eta-squared = .08; difficulty, F (3, 44) = 1.10, *ns* eta-squared = .05; anxiety, F (3, 42) = .86, *ns*, eta-squared =.06; avoidance, F (3, 42) = 1.32, *ns*, eta-squared = .06).

Therefore, Hypothesis 4 received no significant support when the Battery of Interpersonal Capabilities was used as a measure of behavioral flexibility. Individuals in Quadrants 2 and 3 (high BC–low SE and high BC–high SE) did not have significantly different ranges of interpersonal capabilities than individuals in Quadrants 1 and 4 (low BC–low SE and low BC–high SE).

Cognitive flexibility. It was predicted that individuals in Quadrants 2 (high BC–low SE) and 3 (high BC–high SE) would have significantly higher levels of cognitive flexibility than those in Quadrants 1 (low BC–low SE) and 4 (low BC–high SE). This hypothesis was not supported. For the overall sample, an ANOVA indicated that there

were no significant differences in cognitive flexibility scores by quadrant (F (3, 109) = 1.76, *ns*, eta-squared = .05). This finding was repeated within the managerial subgroup, (F (3, 41) = 2.25, *ns*, eta-squared = .14). However, the results indicated medium to large effect sizes for these analyses.

Thus, Hypothesis 4 received no support when cognitive flexibility was used as a measure of behavioral flexibility. Individuals classified into the different quadrants did not have significantly different levels of cognitive flexibility.

Summary. Overall, Hypothesis 4 received only weak support. Within the overall sample, the results indicated no significant differences between the quadrants on any of the measures of behavioral flexibility. Within the managerial subgroup, significant differences between quadrants were only found when self-monitoring was used as a measure of behavioral flexibility. Furthermore, the expected differences between quadrants were only found for one pairwise comparison ('high Behavioral Chameleon – high Situational Engineer' compared to 'low Behavioral Chameleon – high Situational Engineer'). Thus, the only support that Hypothesis 4 received was the finding that individuals who have a high likelihood of using both strategies had higher levels of self-monitoring than those who tended to rely on Situational Engineer strategies.

Hypothesis 5: Proactive Personality

It was predicted that individuals with high proactive personality scores would have significantly higher scores on the Situational Engineer component of the managerial task.

Hypothesis 5 was supported within the overall sample. Proactive personality was significantly correlated with scores on the Situational Engineer component (r = .23, p <

.01), and the results indicated a small to medium effect size.

Hypothesis 5 also received strong support within the managerial subgroup. The correlation between proactive personality and the Situational Engineer component was $r = .35, p < .01$ (indicating a medium effect size). Therefore, both within the overall sample and the managerial subgroup, individuals who reported a greater orientation towards changing environments also reported a greater a greater likelihood of using leadership strategies aimed at changing the environment to fit behavior. While the relationship between proactive personality and the Situational Engineer component appeared to be stronger within the managerial subgroup, the difference between the correlation coefficients was not significant ($z = .84$, *ns*). However, the effect size was larger within the managerial subgroup.

Hypothesis 6: Proactive Personality Scores by Quadrant

It was predicted that individuals in Quadrants 3 and 4 (high BC–high SE and low BC–high SE) would have significantly higher scores on proactive personality than those in Quadrants 1 and 2 (low BC–low SE and high BC–low SE).

For the sample that included all participants, an ANOVA indicated that the overall test of differences in means was significant ($F(3, 118) = 3.13, p < .05$, eta-squared = .07), and the results indicated a medium effect size. *A priori* comparisons indicated that participants in Quadrants 3 and 4 (high BC–high SE and low BC–high SE) had significantly higher proactive personality scores than individuals in Quadrants 1 and 2 (low BC–low SE and high BC–low SE) ($t(118) = 2.01, p < .05, d = .37$). Thus, Hypothesis 6 was supported within the overall sample. The results indicated a small to medium effect size for the *a priori* contrast. Individuals reporting a greater likelihood of

using Situational Engineer and Behavioral Chameleon strategies, as well as those who tended to rely on Situational Engineer strategies, had higher levels of proactive personality than individuals who tended to rely on Behavioral Chameleon strategies or who reported a low tendency of using both Behavioral Chameleon and Situational Engineer strategies.

An ANOVA provided partial support for Hypothesis 6 within the managerial sample. The overall test of differences in means was significant for the managerial sample, (F (3, 50) = 4.841, $p < .05$, eta-squared = .23), indicating a large effect size. However, an *a priori* contrast between Quadrants 1 and 2 (low BC–low SE and high BC–low SE) combined and Quadrants 3 and 4 (high BC–high SE and low BC–high SE) combined was not significant (t (50) =1.25, *ns*, d = .35). Again, the results of the *a prior* contrast indicated a small to medium effect size. A *post hoc* Scheffé test indicated that individuals in Quadrant 3 (high BC–high SE) had significantly higher proactive personality scores than Quadrants 1 (low BC–low SE) and 4 (low BC–high SE), but did not differ significantly from Quadrant 2 (high BC–low SE). In other words, individuals who reported a greater tendency to use both Behavioral Chameleon and Situational Engineer strategies had higher levels of proactive personality than individuals in all quadrants except the 'high Behavioral Chameleon-low Situational Engineer' combination. The expected differences between Quadrant 4 and Quadrants 1 and 2 were not supported. Individual who tended to rely on Situational Engineer strategies (Quadrant 4) did not have significantly higher levels of proactive personality than individuals with lesser tendencies to use Situational Engineer strategies (Quadrants 1 and 2). Therefore, within the managerial sample, Hypothesis 6 was only partially supported.

Again, the results for the overall F tests indicated larger effect sizes for the managerial subgroup than for the overall sample.

Hypothesis 7: Machiavellianism

It was expected that the Machiavellianism scale would be significantly and positively correlated with the Situational Engineer component and significantly and negatively correlated with the Behavioral Chameleon component.

Within the overall sample, this hypothesis received partial support. There was a strong positive correlation between the Situational Engineer component and the Mach IV scale ($r = .43, p < .01$), indicating a medium to large effect size. Contrary to expectations, the Behavioral Chameleon component was also positively correlated with the Mach IV scale ($r = .30, p < .01$), and the results indicated a medium effect size. Thus, individuals who tended to have more Machiavellian beliefs also reported a greater likelihood of using both leadership strategies aimed at changing the environment to fit behavior and strategies aimed at changing behavior to fit the environment.

Similar results were found within the managerial sample. Again, there was a strong positive correlation between the Situational Engineer component and the Mach IV scale ($r = .49, p < .01$), but the Behavioral Chameleon component was also positively correlated with this scale ($r = .28, p < .05$). Again, the results indicated a medium (Behavioral Chameleon component) to large (Situational Engineer component) effect size for the relationship between the decision making task components and the Mach IV scale. Individuals who tended to have more Machiavellian beliefs also reported a greater likelihood of using both leadership strategies aimed at changing the environment to fit behavior and strategies aimed at changing behavior to fit the environment. While a

significant correlation between the Behavioral Chameleon component and the Machiavellianism scale was predicted, it was expected that this relationship would be negative. Therefore, Hypothesis 7 received only partial support.

Hypothesis 8: Machiavellianism Scores by Quadrant

It was hypothesized that individuals with Behavioral Chameleon and the Situational Engineer scores that placed them in Quadrant 4 (low BC–high SE) would have significantly higher scores on Machiavellianism than individuals in Quadrant 2 (high BC–low SE).

Within the overall sample, an ANOVA indicated that the overall test of differences in means was significant (F (3, 109) = 4.41, $p < .01$, eta-squared = .11), and the results indicated a medium to large effect size. However, an *a priori* contrast comparing Quadrant 2 (high BC–low SE) to Quadrant 4 (low BC–high SE) was not significant (t (109) =1.57, *ns*, $d = .30$). Thus, Hypothesis 8 was not supported, although the results indicated a small to medium effect size. A *post hoc* Scheffé test revealed significantly higher scores for those in Quadrant 3 (high BC–high SE) than individuals in Quadrant 1 (low BC–low SE), but did not indicate any other significant pairwise comparisons. In other words, individuals who reported a greater likelihood of using both Behavioral Chameleon and Situational Engineer strategies had higher levels of Machiavellianism than those who reported lower tendencies of using both strategies. Overall, Hypothesis 8 did not receive significant support within the overall sample.

For the managerial subgroup, an ANOVA indicated no differences in means by quadrant (F (3, 41) = 2.42, *ns*, eta-squared = .15). However, the results indicated a medium effect size. The *a priori* planned contrast between Quadrant 2 and Quadrant 4

was not significant (t (41) = 1.31, *ns*, d =.41), although the results indicated a small to medium effect size. *Post hoc* tests were not conducted because the overall F test was not significant. Thus, Hypothesis 8 was not significantly supported within the managerial sample.

Secondary Analysis of the Four-Quadrant Model

In addition to testing the four-quadrant model (Hypotheses 2, 4, 6, 8) through a series of univariate ANOVAs, this model was also explored through a multivariate analysis of variance (MANOVA). The MANOVA was not used as the primary analysis because this statistical model excludes individuals who have missing data on any of the dependent variables. Out of the 167 participants, only 93 completed all personality variables used in the study. Within the managerial subgroup, only 29 participants completed all personality instruments. Therefore, the use of the MANOVA as a primary analysis would have excluded a large amount of data collected for this study. It should also be noted that the follow-up ANOVAs within the MANOVA procedure exclude individuals who did not complete all the personality variables, whereas the univariate ANOVAs that were used in the primary analysis did not exclude individuals who had missing data on one or more of the personality variables. Therefore, the ANOVAs in the primary analysis were conducted on a slightly different sample than the ANOVAs in the secondary analysis.

MANOVA – All Participants

A MANOVA indicated that there were significant differences among the four quadrants on the personality variables included in the study, Wilks' Lambda = .55, F (27, 237) = 1.97, $p < .01$, multivariate eta-squared = .18.

ANOVAs were conducted on each of the personality variables as follow-up tests to the significant MANOVA. For the sample that included all participants, ANOVAs indicated significant differences by quadrant for both self-monitoring (F (3, 89) = 2.81, p < .05, partial eta-squared = .09) and Machiavellianism (F (3, 89) = 3.74, p < .05, partial eta-squared = .11). ANOVAs indicated no significant differences by quadrant for the remaining personality variables (work locus of control, F (3, 89) = 1.69, *ns*, partial eta-squared = .05; cognitive flexibility, F (3, 89) = 1.53, *ns*, partial eta-squared = .05; BIC global capability, F (3, 89) = .13, *ns*, partial eta-squared = .00; BIC difficulty, F (3, 89) = 1.91, *ns*, partial eta-squared = .06; BIC anxiety, F (3, 89) = .33, *ns*, partial eta-squared = .01; BIC avoidance, F (3, 89) = .55, *ns*, partial eta-squared = .02; proactive personality, F (3, 89) = .14 *ns*, partial eta-squared = .06). In contrast, the ANOVAs conducted within the primary analysis indicated significant differences by quadrant for work locus of control, proactive personality, and Machiavellianism. Thus, the results of the secondary analysis are only partially consistent with the results of the primary analysis.

Additional analyses were conducted on the two personality variables where ANOVAs in the secondary analysis had indicated significant differences by quadrant. For the self-monitoring variable, *a priori* comparisons indicated that participants in Quadrants 2 and 3 (high BC–low SE and high BC–high SE) had significantly different self-monitoring scores than individuals in Quadrants 1 and 4 (low BC–low SE and low BC–high SE) (t (89) = -2.22, p < .05, d = .24). Hypothesis 4 predicted that Quadrants 2 and 3 (high BC–low SE and high BC–high SE) would have higher scores on self-monitoring as a measure of behavioral flexibility, but the results were in the opposite direction than was expected. Individuals in Quadrants 1 and 4 (low BC–low SE and low

BC–high SE) had significantly higher levels of self-monitoring. Therefore, this hypothesis was not supported. It should be noted that the primary analysis indicated no significant differences in self-monitoring between quadrants. Therefore, the secondary analysis produced findings that were counterintuitive and inconsistent with the results of the primary analysis.

For the Machiavellianism variable, *a priori* comparisons indicated that participants in Quadrant 4 (low BC–high SE) had significantly higher Machiavellianism scores than individuals in Quadrant 2 (high BC–low SE) (t (89) = 2.37, $p < .05$, d = .25). Hypothesis 8 stated that individuals in Quadrant 4 (low BC–high SE) would have significantly higher Machiavellianism scores than individuals in Quadrant 2 (high BC–low SE). This hypothesis was supported. Individuals in who reported a high tendency to use Situational Engineer strategies and a low tendency to use Behavioral Chameleon Strategies were significantly more Machiavellian than individuals who tended to rely on Behavioral Chameleon strategies. These results were inconsistent with the results of the primary analysis, which found no significant differences between these two quadrants.

Thus, within the overall sample, hypothesized differences by quadrant (Hypotheses 2, 4, 6) did not receive support from the secondary analysis. However, Hypothesis 8 was supported by this secondary analysis.

MANOVA – Managerial Subgroup

For the managerial subgroup, the MANOVA indicated significant differences among the four quadrants on the personality variables included in the study (Wilks' Lambda = .15, F (27, 50) = 1.73, $p < .05$, multivariate eta-squared = .47).

Analyses of variance on each of the personality variables were conducted as

follow-up tests to the MANOVA. ANOVAs indicated significant differences by quadrant for work locus of control (F (3, 25) = 3.82, $p < .05$, partial eta-squared = .31) self-monitoring (F (3, 25) = 4.21, $p < .05$, partial eta-squared = .34), and proactive personality (F (3, 25) = 3.30, $p < .05$, partial eta-squared = .28). ANOVAs indicated no significant differences by quadrant for the remaining personality variables (cognitive flexibility, F (3, 25) = 1.73, *ns*, partial eta-squared = .17; BIC global capability, F (3, 25) = 1.30, *ns*, partial eta-squared = .14; BIC difficulty, F (3, 25) = .67, *ns*, partial eta-squared = .08; BIC anxiety, F (3, 25) = .37, *ns*, partial eta-squared = .04; BIC avoidance, F (3, 25) = .23, *ns*, partial eta-squared = .03; Machiavellianism, F (3,25) = 2.35, *ns*, partial eta-squared = .22). In contrast, the ANOVAs conducted for the managerial subgroup within the primary analysis indicated significant differences by quadrant for work locus of control and self-monitoring. Thus, the results of the secondary analysis are partially consistent with the results of the primary analysis.

Additional analyses were conducted on the three personality variables where follow-up ANOVAs indicated significant differences by quadrant.

For the work locus of control variable, *a priori* comparisons indicated that participants in Quadrant 1 (low BC – low SE) had work locus of control scores indicating a significantly more internal locus of control than individuals in Quadrants 2, 3, and 4 (high BC–low SE, high BC–high SE, low BC–high SE) (t (25) = 3.82, $p < .05$, d = 1.53). However, the results were in the opposite direction than was expected. Hypothesis 2 stated that participants in Quadrant 1 (low BC – low SE) would have a more external locus of control than individuals in the other three Quadrants. This hypothesis was not supported. Individuals who reported a low tendency to use both Behavioral Chameleon

and Situational Engineer strategies has more internal locus of control than individuals in the other quadrants. These results are consistent with the results obtained in the primary analysis.

For the self-monitoring variable, *a priori* comparisons indicated that participants in Quadrants 2 and 3 (high BC–low SE and high BC–high SE) did not have significantly different self-monitoring scores than individuals in Quadrants 1 and 4 (low BC–low SE and low BC–high SE) (t (25) = 1.22, *ns*, d = .49). Hypothesis 4 predicted that Quadrants 2 and 3 (high BC–low SE and high BC–high SE) would have higher scores on this variable. Therefore, this hypothesis was not supported. Within the primary analysis, the same results were obtained for the specific planned contrasts used to test Hypothesis 4.

For the proactive personality variable, *a priori* comparisons indicated that participants in Quadrants 1 and 2 (low BC–low SE and high BC–low SE) did not have significantly different proactive personality scores than individuals in Quadrants 3 and 4 (high BC–high SE and low BC–high SE) (t (25) = 3.30, *ns*, d = 1.32). Hypothesis 6 stated that Quadrants 3 and 4 (high BC–high SE and low BC–high SE) would have higher scores on this variable. Therefore, this hypothesis was not supported. These results are consistent with the findings of the primary analysis regarding the specific planned contrasts used to test Hypothesis 6.

Thus, within the managerial sample, hypothesized differences by quadrant (Hypotheses 2, 4, 6, and 8) did not receive support from the secondary analysis.

Summary of Results

Overall, the results indicated partial support for the predicted relationships

between personality variables and the tendency to use Behavioral Chameleon and Situational Engineer strategies. Hypotheses regarding relationships between specific personality variables and the two components of the decision making exercise received the strongest support, particularly within the managerial subgroup. Results related to levels of individual difference variables within different quadrants received less support within both the overall sample and the managerial subgroup. A secondary analysis of the four-quadrant model, which consisted of a MANOVA followed by univariate ANOVAs, was generally not supportive of the hypothesized differences by quadrant.

Locus of Control

Hypotheses 1 and 2 were not supported in either the overall sample or the managerial subgroup. For both samples, significant relationships were found between work locus of control and both components of the decision making task. However, these results were in the opposite direction as what was hypothesized.

Behavioral Flexibility

Hypotheses 3 and 4 received some support within both samples, but results varied among the different measures of behavioral flexibility used in the study. Within the overall sample, only the results of the BIC avoidance scale provided some support for Hypothesis 3. Within the managerial sample, substantial support was found for Hypothesis 3 when the self-monitoring and the Battery of Interpersonal Capabilities instruments were used as measures of behavioral flexibility. However, results were weaker for Hypothesis 4. This hypothesis was only supported within the primary analysis of the managerial subgroup when self-monitoring was used as a measure of behavioral flexibility. Hypothesis 3 or 4 received no support when cognitive flexibility

was used as a measure of behavioral flexibility, and counterintuitive results were found for this variable within the overall sample.

Proactive Personality

Hypothesis 5 regarding proactive personality was strongly supported within both samples. Hypothesis 6 was supported within the overall sample, and received partial support within the managerial subgroup. However, this Hypothesis 6 was not supported within the secondary analysis.

Machiavellianism

The hypothesized relationship between the Machiavellianism scale and the Situational Engineer component (Hypothesis 7) was strongly supported within both samples. However, a counterintuitive result was found for the Behavioral Chameleon component. Within the primary analysis, Hypothesis 8 did not receive significant support in either sample. However, the secondary analysis indicated significant support for Hypothesis 8 within the overall sample, but not the managerial sample.

The results of the primary analyses are summarized in *Figure 3* below.

Figure 3
Summary of Results for Primary Analyses

Hypotheses	**All Participants**	**Managerial Subgroup**
1. Work locus of control – exercise components	Not supported, significant counterintuitive results.	Not supported, significant counterintuitive results.
2. Work locus of control – quadrants	Not supported, significant counterintuitive results.	Not supported, significant counterintuitive results.
3. Behavioral flexibility – exercise components	Partially supported.	Partially supported.
a. Self-monitoring	a. Not supported, no significant results.	a. Supported, significant results.
b. Range of interpersonal capabilities	b. Partially supported, significant results for BIC avoidance scale.	b. Partially supported, significant results for BIC anxiety and avoidance scales.
c. Cognitive flexibility	c. Not supported, significant counterintuitive results.	c. Not supported, no significant results.
4. Behavioral flexibility - quadrants	Not Supported.	Partially supported.
a. Self-monitoring	a. Not supported, no significant results.	a. Partially supported, some significant results.
b. Range of interpersonal capabilities	b. Not supported, no significant results.	b. Not supported, no significant results.
c. Cognitive flexibility	c. Not supported, no significant results.	c. Not supported, no significant results.
5. Proactive personality – exercise components	Supported, significant results.	Supported, significant results.
6. Proactive personality - quadrants	Supported, significant results	Partially supported, some significant results.
7. Machiavellianism – exercise components	Partially supported, but significant counterintuitive results for Behavioral Chameleon component.	Partially supported, but significant counterintuitive results for Behavioral Chameleon component.
8. Machiavellianism - quadrants	Not supported, no significant results.	Not supported, no significant results.

CHAPTER VI: DISCUSSION AND CONCLUSIONS

Chapter VI discusses the results obtained in the empirical study. This chapter begins with a discussion of the implications of the findings regarding hypothesized relationships between individual difference variables and the Behavioral Chameleon and Situational Engineer strategies. The findings regarding the four-quadrant model of combinations of Behavioral Chameleon and Situational Engineer strategies are also explored. In addition, the discussion includes some observations regarding the exploration of Behavioral Chameleon and Situational Engineer behaviors as distinct strategies. Suggestions for future research are presented throughout the chapter where appropriate. The chapter ends with a discussion of the limitations of the current study and with concluding remarks regarding the constructs under investigation.

Discussion

This dissertation attempted to integrate two apparently contradictory themes within leadership research regarding the strategies leaders use to achieve congruence between their leadership style and environmental demands. The dissertation also attempted to provide some empirical support for this theoretical integration through an exploration of the relationships between personality variables and the use of Behavioral Chameleon and Situational Engineer strategies.

Relationship between Personality Variables and Behavioral Chameleon and Situational Engineer Strategies

Some of the hypothesized relationships between individual difference variables and the two leadership strategies were supported, but the results differed depending on whether analyses were conducted using the entire sample or a subgroup with prior

managerial experience. These groups were analyzed separately because the results indicated that managers differed significantly from non-managers in their responses to the decision making exercise, as well as in their responses to several of the personality instruments.

Proactive Personality

Analyses using both the overall sample and the managerial subgroup provided strong support for the hypothesis that proactive personality would be significantly and positively related to the Situational Engineer component of the decision making exercise. Thus, it appears that individuals with a high tendency to take actions aimed at changing the environment to fit leadership style also tend to have high levels of a personality variable that indicates an overall orientation toward changing environments and feeling unconstrained by situations.

While no hypotheses were generated regarding the relationship between proactive personality and the Behavioral Chameleon component, it was expected that these variables would be unrelated. Within the overall sample, there was no significant relationship between proactive personality and the Behavioral Chameleon component of the decision making exercise. However, within the managerial subgroup, there was a significant and positive correlation between this variable and the Behavioral Chameleon component. Thus, at least within a managerial population, individuals who indicated a high tendency to adjust their leadership style to fit the environment also had high levels of a personality variable that indicated a tendency to change environments. While a slightly stronger correlation was observed between proactive personality and the Situational Engineer component than between proactive personality and the Behavioral

Chameleon component, there was no significant difference in the strength of the correlations. Therefore, within the managerial sample, there was a roughly equal correlation between proactive personality and both components of the decision making exercise.

While these results were surprising, and somewhat counterintuitive, relationships between several other variables in the study indicated similar results. For example, a strong correlation was observed between the Situational Engineer component and the Behavioral Chameleon component. Thus, it appears that individuals who report that they are likely to choose strategies aimed at changing environments to fit behavior also report that they are likely to change their behavior to fit environments. Similarly, proactive personality was significantly correlated with most of the measures of behavioral flexibility used in this study. Therefore, individuals with high levels of behavioral flexibility also tended to be oriented towards changing their environments. Overall, these results indicated that individuals who have a personality disposition to proactively shape environments also have a tendency to adapt their own behavior to the situation.

These results suggest that proactive personality in managers may be more related to an 'active versus passive' approach to leadership situations, rather than an orientation towards focusing only on changing environments to fit preferred behaviors. Within this interpretation, both Situational Engineer and the Behavioral Chameleon strategies can be viewed as active attempts to gain control over outcomes. As Rothbaum et al. (1982) suggest, changing the environment to fit personal wishes or changing the self to fit the environment can both be viewed as methods that individuals use to gain control over outcomes. It may be that individuals with high proactive personality are focused on

influencing outcomes in their environment, rather than making the environment fit their behavior. As a result, such individuals may proactively employ whichever strategy is most likely to result in the outcomes they wish to achieve. In contrast, individuals with a more passive response may be less likely to try to improve leadership style-environment congruence through either strategy. Perhaps it would be useful for future research to explore the relationship between proactive personality and the use of active and passive coping styles in order to reach a better understanding of the use of Behavioral Chameleon and Situational Engineer strategies.

Behavioral Flexibility

Results also indicated support for the hypothesized relationship between behavioral flexibility and the Behavioral Chameleon component of the decision making task. Again, results differed dramatically depending on whether all participants were included in the analysis or whether only those with managerial experience were included.

General evaluation. This hypothesis only received weak support within the overall sample. When all participants were included in the analysis, only the results of the BIC avoidance scale provided support for this hypothesis by indicating that individuals with high scores on the Behavioral Chameleon component were significantly less likely to avoid situations where they would have to display a wide variety of interpersonal behaviors. Neither self-monitoring nor cognitive flexibility provided support for a positive relationship between behavioral flexibility and the Behavioral Chameleon component. Thus, this hypothesis was only marginally supported when all participants were included in the analyses.

In contrast, support for this relationship was much stronger within the managerial

subgroup. The results for all measures of behavioral flexibility, with the exception of cognitive flexibility and two elements of the BIC (global capability and difficulty), were supportive of this relationship. These results indicated that individuals with stronger tendencies to take Behavioral Chameleon strategies had significantly higher self-monitoring scores, expressed significantly less anxiety when displaying a wide range of interpersonal behaviors, and were significantly less likely to avoid situations where it would be necessary to display these behaviors. Overall, these findings signal substantial support for the hypothesis that managers with high levels of behavioral flexibility would be more likely to use Behavioral Chameleon strategies.

While, at least in a managerial sample, the tendency to use Behavioral Chameleon strategies appears to be related to higher levels of behavioral flexibility, further research should explore the extent to which situational factors also have an impact on the use of this strategy. For example, individuals in highly constrained situations may be more likely to attempt Behavioral Chameleon strategies, because strategies aimed at changing the environment may be less likely to succeed in such situations. In this context, the leader may be more likely to attempt to change his or her behavior to fit the situation even if he or she does not have high levels of behavioral flexibility.

While the current study was not designed to address this issue, the investigator initially expected that the use of Behavioral Chameleon strategies would serve an adaptive function for individuals in highly constrained situations, whereas the use of Situational Engineer strategies would serve an adaptive function for those individuals with low levels of behavioral flexibility. While the current study does not allow a test of the first possibility, it is interesting to note that the tendency to use Situational Engineer

strategies did not appear to be related to low levels of behavioral flexibility. Within the overall sample, as well as the managerial subgroup, measures of behavioral flexibility were not related to the likelihood of using Situational Engineer strategies. It appears that individuals with low levels of behavioral flexibility are no more likely to use a Situational Engineer approach, but they are no less likely to do so either. Therefore, the use of Situational Engineer strategies does not appear to be an adaptive strategy used by individuals with low levels of behavioral flexibility. Further research is needed to explore whether the use of Behavioral Chameleon strategies represents an adaptive function for individuals in highly constrained situations.

Measures of behavioral flexibility. Prior research (e.g., Hall, Workman, & Marchioro, 1998) indicated that there was overlap between different measures of behavioral flexibility but that several existing measures appear to be tapping into different aspects of the same construct. The current study supported this finding. Different measures of behavioral flexibility were significantly correlated with each other, but their relationship with the Behavioral Chameleon component differed considerably.

Within the overall sample, only the BIC avoidance scale and the cognitive flexibility scale were significantly correlated with the Behavioral Chameleon component. However, their relationships with this component were in opposite directions. Individuals who had a lower tendency to avoid situations where they would have to display a wide variety of behaviors tended to be more likely to use Behavioral Chameleon strategies. In contrast, individuals with higher levels of cognitive flexibility were less likely to use Behavioral Chameleon strategies.

Within the managerial subgroup, individuals with a high tendency to use

Behavioral Chameleon strategies had high levels of self-monitoring, and had scores on the BIC indicating lower anxiety when displaying a wide range of behaviors, and a reported a lower tendency to avoid situations that would require the use of a wide range of interpersonal behaviors. The relationships between this component and the BIC global capability and difficulty scales were not significant. There appeared to be no relationship (either positive or negative) between cognitive flexibility and the Behavioral Chameleon component.

These differing relationships with the Behavioral Chameleon component provide a further indication that the different measures of behavioral flexibility used in this study are not equivalent. Because it appears that each instrument is capturing different aspects of behavioral flexibility, researchers should carefully consider which measures to use in future research.

Self-monitoring and range of interpersonal capabilities. It was highly encouraging that significant results were found for both the self-monitoring scale and several components of the BIC scale within the managerial subgroup. A high score on the self-monitoring scale indicates a high sensitivity to social environments and a high ability to adjust self-presentation to fit different environments. In contrast, the BIC measures the extent to which an individual possesses a broad repertoire of interpersonal behaviors. Both types of behavioral flexibility are likely to be important for successful use of Behavioral Chameleon strategies to leadership environments. Having a wide behavioral repertoire does not necessarily mean that an individual will have the perceptiveness to know when to use the different behaviors (Hooijberg et al, 1997). As Boal and Hooijberg (2001) suggest, "leaders not only need a large behavioral repertoire

but also the ability to select the right roles for the situation. . . . leaders must carefully select the appropriate leadership role for their interactions with subordinates, peers or superiors" (p. 530). By using both the BIC and self-monitoring as measures of behavioral flexibility, future research may able to determine the extent to which both types of flexibility contribute to the successful use of Behavioral Chameleon strategies.

Cognitive flexibility. While the results for both the BIC and self-monitoring provided support for the hypothesized relationship between behavioral flexibility and the Behavioral Chameleon component, cognitive flexibility did not support this relationship. Within a managerial sample, this type of behavioral flexibility does not appear to have an impact on either the tendency to use Behavioral Chameleon or Situational Engineer strategies to the environment. Therefore, further research on this measure of behavioral flexibility was not encouraged in the context of the Behavioral Chameleon approach.

While no significant relationship was found for the managerial sample, counterintuitive results were found for the overall sample. Individuals with higher levels of cognitive flexibility tended to be significantly less likely to take actions categorized as Behavioral Chameleon strategies. One element of cognitive flexibility may point towards a possible explanation for these counterintuitive results. According to Martin and Rubin (1995), one component of cognitive flexibility is an individual's "awareness that in any given situation there are options and alternatives available" (p. 623). While the current study design anticipated that participants would view the situation described in the scenario as the 'environment,' it may be that the participants viewed the task itself as the environment. The decision making task asked participants to rate their preference for actions from a list of possible actions. The awareness that alternatives existed that were

not included on the list may have led individuals with high levels of cognitive flexibility to generate their own preferred options, and thus give lower likelihood ratings to actions that were listed. In contrast, individuals with lower levels of cognitive flexibility may not have thought beyond the list of actions presented to them. However, this explanation does not appear to be relevant to individuals with prior managerial experience because these counterintuitive results were not found within the managerial subgroup.

Machiavellianism

The results for both samples strongly supported the hypothesized relationship between Machiavellianism and the Situational Engineer component of the decision making task. As expected, individuals with high Machiavellianism scores had high preferences for actions aimed at changing their environments. Thus, there appears to be a strong relationship between this personality trait and the tendency to use Situational Engineer strategies.

However, an unexpected finding was the significant positive correlation between Machiavellianism and the Behavioral Chameleon approach within both the overall sample and the managerial subgroup. This finding suggests that the Behavioral Chameleon concept may need to be modified to account for the tendency for both individuals with high behavioral flexibility, and individuals with high levels of Machiavellianism, to use this strategy.

Initially, Behavioral Chameleon strategies were thought to be used to adapt behavior to the demands of the situation, including the people in the situation. The literature review included Servant Leadership (e.g., Greenleaf, 1991), in which the leader learns what his or her subordinates need and then adjusts his or her behavior fit these

needs, as one example of a theory supporting the Behavioral Chameleon approach. Such behavior does not seem to be congruent with high levels of Machiavellianism. Perhaps the Behavioral Chameleon construct needs to be redefined as less of a strategy aimed at meeting other's needs, and more of strategy used to obtain the leader's goals within the constraints of the environment. A study by Drory and Gluskinos (1980) supports this modification. They found that leaders with higher Machiavellianism scores tended to change their leadership style from a more directive to a more participative approach when faced with unfavorable conditions. The authors interpreted this not as an attempt to meet the needs of group members, but "as an attempt to better utilize group resources when faced with a more difficult task" (p. 85). Thus, leaders may adjust their leadership style to fit situational demands in order to accomplish specific personal or organizational goals, rather than to meet the needs or demands of subordinates. This modification of the Behavioral Chameleon construct is consistent with the definition of 'leader style' discussed in Chapter II as "a calculated way of soliciting the commitment and obedience of subordinates to the goals of the executive" (Biggart, 1981, p. 206). In this context, it is not surprising that both the Situational Engineer approach and the Behavioral Chameleon approach were positively correlated with Machiavellianism.

Further research should be conducted that incorporates this modified perspective on the Behavioral Chameleon approach to leadership environments. Specifically, it may be important to investigate the impact of different sources of the environmental demands that require changes in leadership behavior. Individual differences, such as level of Machiavellianism, may have a major impact on how a leader responds to pressure from environments to change his or her behavior. For example, the responses of high and low

Machiavellian leaders may differ dramatically depending on whether the demands are coming from subordinates, peers, or supervisors. In turn, the tendency to change behavior in response to demands from different sources may result in different levels of leader effectiveness. For example, Tsui and Ashford (1994) suggest that managers who rely on changing behavior to fit constituent's demands may be ineffective because the leader could be viewed as weak and too focused on pleasing others. In addition, judgments regarding the effectiveness of this strategy may differ depending on the source of the judgments. For example, Hooijberg (1996) found that behavioral flexibility across situations was positively related to superiors' ratings of managers' effectiveness whereas such variability had a negative relationship with subordinates' ratings of managers' effectiveness. He proposes that one possible explanation for this finding is that subordinates may see such variability as inconsistency, whereas superiors may view such changes as appropriate responses to situational pressures. Further research on these issues would be important for establishing some of the boundary conditions surrounding the effective use of the Behavioral Chameleon strategy, as well as the likelihood that a leader would use this approach.

Work Locus of Control

The hypothesized relationships between work locus of control and the Behavioral Chameleon and Situational Engineer components were not supported. Within both the overall sample and the managerial subgroup, individuals with high scores on the Behavioral Chameleon and Situational Engineer components had significant tendencies towards an external locus of control. In other words, individuals who believed they had little ability to have an impact on outcomes at work tended to respond that they would be

highly likely to take the actions listed for both components of the decision making task.

This unexpected and counterintuitive finding may reflect on the nature of the decision making task, rather than on the likelihood that managers will try to change their environments or change their behavior. As discussed earlier in the context of cognitive flexibility, the study anticipated that participants would view the situation described in the scenario as the 'environment.' Instead, individuals with an internal locus of control may have viewed the decision making task as the environment. As Miller, Kets de Vries, and Toulouse (1982) suggest, leaders with an internal locus of control may view their environments as more open to manipulation, whereas individuals with an external locus of control may view the environment as rigidly constrained and unchangeable. Perhaps individuals with an internal locus of control did not feel constrained by the decision making task 'environment' to consider only the options presented to them. They may have tended to rate all items from the list as being actions they were less likely to take because they preferred a self-created option that was not on the list. In contrast, individuals with a more external locus of control may have felt constrained by the options presented to them within the decision making task 'environment.' As a result, they may have had a higher tendency to rate the listed options as ones they would be likely to take.

These counterintuitive results for both work locus of control and cognitive flexibility indicate that a structured decision making task might not be the ideal method of capturing Behavioral Chameleon and Situational Engineer strategies. An additional finding supports this assertion. In the current study, individuals with managerial experience had significantly lower scores than non-managers on both components of the decision making task. Thus, responses from individuals with managerial experience

indicated that they were significantly less likely to take the Behavioral Chameleon and Situational Engineer strategies presented in the decision making exercise. This finding may indicate that managers are less likely to change their environments and less likely to change their behavior in order to achieve congruence between leadership style and the environment. However, this seems unlikely, as failure to improve the fit between leader behavior and environmental demands is liable to be ineffective.

A more likely explanation is that these findings, along with the similar counterintuitive results for self-monitoring and work locus of control, are an artifact of the structured decision making task. When rating their likelihood of using actions presented in the decision making task, it may be that managers drew upon their past experience to consider options not presented within the decision making task. This may have led these individuals to generate their own preferred options, and thus give lower likelihood ratings to actions that were listed. In contrast, individuals with no managerial experience may have approached the decision making task as presenting a comprehensive list of all available options. Thus, they may have been more likely to rate highly the options that they would consider using.

While a similar explanation was offered for the counterintuitive results for cognitive flexibility and work locus of control, it is difficult to tell whether the explanation really applies to all of these findings. It should be noted that, compared to non-managers, those with managerial experience had higher levels of cognitive flexibility and a more internal work locus of control. These variables appear to be linked, but within the current study, it is impossible to determine whether managerial experience, high levels of cognitive flexibility, an internal locus of control, or a combination of the

three was responsible for the counterintuitive scores on the structured decision making task.

In any case, these findings suggest that a structured decision making task is not the ideal method of measuring the use of Behavioral Chameleon and Situational Engineer strategies. It may be useful for future research to utilize more open-ended exercises that allow participants to construct their own preferred response, rather than requiring them to choose from a list of standard responses. Participants' responses could then be content coded for Behavioral Chameleon and Situational Engineer strategies. This may result in a better test of the relationship between the two strategies and the variables of locus of control, cognitive flexibility, and managerial experience. Such research may be able to confirm whether the counterintuitive findings of this study are just artifacts of the current methodology.

This study also used a measure of locus of control that has not been used extensively in published research. It may be useful for future research to use other measures of locus of control and to explore similar constructs, such as self-efficacy. According to Bandura (1994), self-efficacy is an individual's belief that he or she has the ability to perform at a high enough level to be effective. In contrast, locus of control measures the extent to which an individual believes that outcomes are the result of personal behavior or factors beyond his or her control. While these constructs are similar, it would be interesting to explore whether they have different relationships with the use of Behavioral Chameleon and Situational Engineer strategies. For example, a leader may believe that his or her leadership style has an impact on outcomes (locus of control), but the leader may not believe that he or she could adequately perform different

leadership styles in response to changing situational demands (self-efficacy). Thus, it may be worthwhile for future research to explore the relationship between both of these variables and the use of Behavioral Chameleon and Situational Engineer strategies.

The Four-Quadrant Model

The four-quadrant model of Behavioral Chameleon and Situational Engineer strategies did not receive considerable support. The four-quadrant model was tested through two different approaches. The primary analysis consisted of a series of ANOVAs, *a priori* planned contrasts, and *post hoc* tests. The secondary analysis consisted of a MANOVA followed up with a series of ANOVAs and planned contrasts. While neither approach was particularly supportive of the four-quadrant model, the two analyses obtained somewhat different results.

Primary Analysis

Within the primary analysis, results were most supportive for hypothesized differences in levels of behavioral flexibility and proactive personality by quadrant. The results suggested that individuals in Quadrant 3 (high tendency to use Behavioral Chameleon strategies and high tendency to use Situational Engineer Strategies) had significantly higher levels of behavioral flexibility (measured by self-monitoring) and significantly higher levels of proactive personality. This is consistent with the prediction that individuals in this quadrant would take a highly active approach to leadership environments through adjusting both personal behavior and through changing environments. However, the hypothesized differences between other quadrants were only partially supported for these variables. No support was found for hypothesized differences by quadrant for Machiavellianism or work locus of control.

Secondary Analysis

Within the secondary analysis, the four-quadrant model was generally not supported. The one exception was the significant differences between Quadrant 2 (high BC-low SE) and Quadrant 4 (low BC-high SE) on the Machiavellianism scale. This analysis supported the prediction that individuals who tended to rely on Situational Engineer strategies would be significantly more Machiavellian than those who tended to rely on Behavioral Chameleon strategies.

Differences Between Primary and Secondary Analyses.

As discussed earlier, a relatively large portion of the sample did not complete all personality instruments and were excluded from the secondary analysis. While the ANOVAs in the primary analysis included individuals who had missing data on one or more of the personality variables, these individuals were excluded from the ANOVAs conducted within MANOVA procedure. As a result, the follow-up ANOVAs conducted within the secondary analysis included a substantially smaller subset of the participants that were included in the primary analysis. Therefore, it is not surprising that there were some differences in the results. A comparison of the observed power within the primary and secondary analyses indicated that, for both the overall sample and the managerial subgroup, the follow-up ANOVAs within the MANOVA procedure generally resulted in less power than the ANOVAs conducted as part of the primary analysis. While the primary and secondary analyses indicated slightly different results, neither provided substantial support for the hypotheses generated from the four-quadrant model of Behavioral Chameleon and Situational Engineer strategies.

The Four-Quadrant Model and Non-significant Results

There are several possible explanations for the lack of significant findings for most of the hypotheses regarding the four-quadrant model. First, the use of a median split may also have limited the ability to find differences in personality variables between the quadrants. It is likely that individuals who were near the median score on the components of the decision making exercise did not differ substantially from other individuals near the median who were classified into different quadrants. Perhaps an analysis that classified individuals into different quadrants if they scored in the top or bottom third of both components would have been more likely to find significant differences. However, such an analysis was not possible given the sample size. Another potentially useful approach would be to categorize participants into quadrants based on the midpoint of the scale, rather than based on a sample specific split (e.g., mean, median, top/bottom third). This may prove useful for finding differences between quadrants as well as for allowing a more direct comparison between the results of different studies that used this decision making task.

Second, managers and non-managers within the sample responded significantly differently to the decision making task and the personality instruments. When the overall sample was used, this likely had a negative impact on the ability to determine whether there were significant differences between quadrants on the personality variables. For tests of individual relationships between personality variables and task components, this problem was largely mitigated by conducting separate analyses for the managerial subgroup. However, this solution was problematic when applied to tests of differences between quadrants because of the small sample sizes that resulted. These small sample

sizes were the result of several factors. First, a substantial number of those with managerial experience did not complete all of the personality instruments included in the study due to time constraints. While this was an unavoidable compromise necessary to secure participation of the managerial sample, it limited the number of participants included in each quadrant. In addition, several managers were not included in quadrant analyses because they had scores on at least one of the components of the decision making exercise that fell exactly on the median score for that component. While a mean split, rather than a median split, would have mitigated this particular problem, it would have added only 10 additional managers to the overall sample. Because not all participants completed all the instruments, this would have had a negligible impact on the sample sizes for each analysis. In addition, the majority of the participants (both managerial and non-managerial) had scores that placed them in either Quadrant 1 (low BC-low SE) or Quadrant 3 (high BC-high SE). A relatively small number of individuals had scores placing them in Quadrants 2 (high BC-low SE) and 4 (low BC-high SE). The combination of these circumstances led to a situation in which the number of managers in each quadrant ranged from a low of 3 to a high of 23.

The resulting small sample sizes likely contributed to the inability to find significant differences between quadrants. Power analyses for the non-significant F tests indicated that, given the effect sizes that were observed, an increase of 30 to 40 participants in some analyses and 80 to 100 participants in others would have resulted in adequate (0.8) statistical power. Furthermore, many of the analyses using the managerial subgroup indicated substantially larger effect sizes than the effect sizes observed within overall sample. Therefore, further research should explore this model using a larger group

of individuals with prior managerial experience.

However, it should be noted that a larger sample size, and significant result for these *F* tests, would not necessarily have indicated stronger support for the four-quadrant model. For example, some of the significant results obtained for the overall *F* tests did not support the four-quadrant model because the differences on the personality variables were not in the hypothesized directions. Thus, a potentially more important issue is the choice of personality variables that were used in the study. A number of significant correlations were observed between certain variables that were expected to differ by quadrant. For example, proactive personality and several measures of behavioral flexibility were highly correlated. However, scores on these variables were predicted to vary in different directions by quadrant. Perhaps future tests of the four-quadrant model would receive more positive results if individual differences variables that are unrelated to each other, but significantly related to either the Behavioral Chameleon strategy or the Situational Engineer strategy (but not both), are identified. The results do not completely discourage further research on the four-quadrant model, but do point to the need for identification of other relevant individual difference variables prior to retesting the model.

Future research that addresses these issues is necessary in order to provide a stronger test of the four-quadrant model. However, these issues are complicated by the need to use a large number of individuals with managerial experience in order to obtain the sample sizes necessary to provide a powerful test of the model.

Behavioral Chameleon and Situational Engineer Behaviors as Separate Strategies

However, the investigator does not suggest that further research should halt unless

a large managerial sample is obtained. Overall, the results were supportive of further research into the use of Behavioral Chameleon and Situational Engineer strategies to leadership environments, but the concept of these behaviors as distinct strategies may need revision. While it appears that the individual difference variables included in this study have differing relationships with the Behavioral Chameleon and Situational Engineer strategies, the results also suggested that these strategies are significantly connected. For example, the test of the four-quadrant model indicated that most individuals have scores that place them in Quadrant 1 (low likelihood of using Behavioral Chameleon and Situational Engineer strategies) or Quadrant 3 (high likelihood of using Behavioral Chameleon and Situational Engineer strategies). In addition, there was a significant correlation between participants' ratings of their likelihood of using Behavioral Chameleon strategies and their likelihood of using Situational Engineer strategies. Furthermore, two personality variables (self-monitoring and proactive personality) that were expected to distinguish between the two strategies were positively correlated with each other. Thus, it appears that individuals who have a personality disposition to proactively shape environments also have a tendency to adapt their own behavior to the situation.

As discussed in the literature review, French et al. (1974) suggested that individuals can deal with poor person-environment fit either through defensive strategies aimed at minimizing perceptions of poor fit, or through the active strategies of 'adaptation' and 'environmental mastery.' Both adaptation (changing behavior to fit the environment) and environmental mastery (changing the environment to fit behavior) involve active attempts by the individual to achieve congruence with the situation. The

results of the current study suggested that most individuals reported a high tendency of using both 'adaptation' and 'environmental mastery' or they report a low tendency to use both approaches. Rather than retesting the four-quadrant model with a larger sample size, it may be more productive for future research to focus on the use of 'active versus passive' approaches to leadership environments in which the active approach incorporates both Behavioral Chameleon and Situational Engineer strategies. Such research would not require as large samples as would be needed to comprehensively test the four-quadrant model.

In addition, future research could explore whether individuals who take a more active approach to leadership style-environment congruence are more effective as leaders. Perhaps individuals whose scores placed them in Quadrant 3 (high likelihood of using Behavioral Chameleon and Situational Engineer strategies) will be most likely to succeed across situations because they are likely to use both behaviors aimed at changing the environment and those aimed at changing behavior. Denison, Hooijberg, and Quinn (1996) suggest that the possession of a wide range of " behavioral responses and initiatives gives a leader a base from which to best perform in reaction to complex and unanticipated demands" (p. 5). It may be that the most effective and influential leaders have both strategies within their behavioral repertoire, because "organizations need leaders who can change with the unpredictable flow of events and who can also change the direction of that flow" (Pratch & Jacobowitz, 1997, p. 192). Therefore, identifying individual difference variables that distinguish between individuals in Quadrants 1 (low BC-low SE) and Quadrant 3 (high BC-High SE) may be more practically important then exploring differences between all four quadrants. Because most people in this sample

seem to fall into these two groups, differences between these quadrants could be explored with much smaller sample sizes.

An alternate approach to focusing on Quadrants 1 and 3 would be to eliminate the distinction between Behavioral Chameleon and Situational Engineer strategies and to analyze continuous data using a combination of these two strategies. Such an approach could focus on collecting information on active attempts to improve congruence between leadership style and environmental demands, regardless of whether these strategies are viewed as Behavioral Chameleon or Situational Engineer behaviors. The focus of such research would shift to differences between individuals who actively attempt to improve congruence between leadership style and environmental demands and individuals who do not attempt to improve such congruence. Again, such research could be conducted with smaller sample sizes, because the sample would not have to be divided up into quadrants.

Limitations

While this dissertation research was an encouraging step in integrating two apparently competing themes of leadership research, the conclusions are potentially limited by several factors.

One potential limitation of this study was the low reliability observed for the Behavioral Chameleon component of the decision making exercise. This finding was surprising, particularly because prior studies, using both student samples and employee samples, had indicated adequate levels of reliability. In the current study, one potential approach to this problem would have been to eliminate items from the scale that exhibited low item-total correlations. When the item-total correlations of the Behavioral Chameleon component were examined, most were in the .24 to .43 range, but three items

had item-total correlations of less than .2. However, this analysis also indicated that deletion of these three items would not have improved the reliability of the component within the current sample. Therefore, this approach was not used in the current research. While the reliability of the Behavioral Chameleon component was relatively low, it was significantly correlated with several hypothesized personality variables. In other words, individuals with high and low scores on this component demonstrated significant differences in their responses to the individual difference measures. Thus, this scale was still useful for experimental purposes, and the disappointing reliability for this component should not be viewed as compromising the entire study. However, the low reliability may have contributed to the difficulty in testing the four-quadrant model, and may have contributed to the finding of non-significant results for some of the hypotheses. If there were substantial unreliability in this component, then classifications into the quadrants based on this component would also have less then desirable reliability. It would be important to reexamine the Behavioral Chameleon component and to further develop its reliability before using this decision making exercise for further research.

Another potential limitation was the inclusion of both individuals in leadership roles and individuals with no leadership experience. Analyses indicated that responses to the decision making task and to the personality instruments were significantly different for participants with managerial experience compared to those with no managerial experience. Unfortunately, students with no managerial experience made up a substantial portion of the overall sample (43%). Analyses including these participants provided only weak support for the relationship between decision making task components and individual difference variables. Furthermore, effect sizes were generally larger when the

non-managerial participants were excluded from the exercise. There are several potential explanations for this finding. For example, the scenario based leadership exercise may have been too abstract for students who had no prior experience with managerial decision making. Without this experience, they may not have been able to foresee the potential consequences of different actions presented to them in the decision making exercise. Perhaps any future research in this area that includes non-managers in the sample may need to utilize exercises that provide more cues to the context of situations and to the potential consequences of actions. If scenario based paper-and-pencil exercises are used, maybe a smaller number of actions should be presented, along with a short explanation of some of the possible positive and negative outcomes associated with different actions. Such methodology may produce more useful results among a student sample.

While it was disappointing that substantial support for the hypotheses were not found within the overall sample, this should not be surprising. The research was focused on leadership behavior, so useful results were most likely to be found among individuals who had experience with leadership positions. This potential limitation was partially diminished by conducting separate analyses on a smaller group containing only managers. However, the much smaller size of this subgroup somewhat limits the confidence that can be placed in the results, particularly for analyses testing the four-quadrant model. Thus, it may be useful for future research to obtain a larger sample of individuals with managerial experience. While research using managerial samples may be important, research using student samples can also be beneficial for theory development and for establishing boundary conditions of the constructs under investigation (Greenberg, 1987). As Mook (1983) points out, external validity may be

less important when the goal of research is to test and develop theories, rather than predict behavior directly from the results of the study.

Another potential limitation was that roughly two thirds of individuals with prior managerial experience were employed in public sector organizations. Data were not collected on the types of organizations where the remaining managers were employed, but the majority of those with managerial experience were employed in the public sector. The homogeneity of the types of organizations where managerial participants were employed may have restricted the types of people in the sample and the range of responses that were observed. However, it should be noted that the public sector managers in this study were employed in a variety of organizations that likely had very different organizational cultures (e.g., police department, fire department, library, human services, human resources). Therefore, this potential limitation may not have had a substantial impact on the results, because the managers were from a fairly diverse set of organizational environments within the public sector. However, it may be useful for future research to explore whether individuals in certain types of organizations have greater tendencies towards Behavioral Chameleon and Situational Engineer strategies.

The study is also potentially limited by its reliance on self-report data and its reliance on survey methodology for the collection of all data. Thus, common method variance (e.g., Podsakoff & Organ, 1986) may have been a problem. While common methods variance may be of concern in the current study, its existence does not necessarily invalidate conclusions from the research findings (Doty and Glick, 1998). In addition, several characteristics of the research design may have reduced this potential problem. Podsakoff, MacKenzie, Lee, and Podsakoff (2003) suggest that varying the

formats and endpoints of scales, ensuring anonymity of participants, and informing participants that there are no right or wrong answers are procedural strategies that can help to control common methods variance. All of these procedures were used in the current study.

However, a reliance on self-report data may be particularly problematic for measures of behavioral flexibility. Past research has relied heavily on the use of personality tests and self-reports to measure behavioral flexibility. This is odd for a variable with the word 'behavioral' in its definition. Therefore, conclusions are limited to discussing what leaders *say* they do. It would be important for future research to collect data on subordinate, peer, and superior ratings of a leader's behavioral flexibility, level of environmental control, and use of the Behavioral Chameleon or Situational Engineer strategies in order to get a better picture of how leaders actually use these strategies. In the future it would also be very useful to construct simulations in which leaders' use of Situational Engineer and Behavioral Chameleon strategies could be observed. Such research would greatly enhance our understanding of whether leaders actually implement these strategies when faced with environmental changes.

Another potential limitation was the use of a highly structured decision making exercise, which asked participants to rate the likelihood of taking actions within a pre-defined list of responses. As the results for managerial experience, work locus of control, and cognitive flexibility suggested, this 'closed-ended' methodology may not provide the best test of these variables. Future research should explore these issues through less structured methodologies.

Although a potential limitation of this research design was that it placed too many restrictions on the options an individual could take, a contrasting limitation is that the scenarios gave participants significantly more power over the environment than many managers may actually have. The decision making task described the leadership position as having a wide range of flexibility in terms of the authority to make necessary changes in personnel (hiring, firing, promotions, demotions, etc.), structure (reporting relationships, assignment of tasks, etc), and decision making processes (participative, directive, consultative, etc.). However, many managers have substantially less flexibility in controlling their environment than individuals did in the scenarios presented in the decision making task. Thus, it may be important to explore the extent to which situational variables, such as perceptions of environmental control, affect the use of these strategies.

Similarly, the research is limited by the focus on a relatively high managerial position as described in the scenarios. Future research should explore the use of these strategies at multiple managerial levels within the organization. While managers at all levels of an organization are likely to have some degree of environmental control, the leaders who are likely to have the highest degree of control over the environment are an organization's top executives. These individuals "have a major impact upon organizational climate, structure, strategy and even the selection of the environment" (Kets de Vries & Miller, 1984, p. 35). Such high levels of formal influence may increase the likelihood that such individuals can achieve person-environment congruence through modifying the environment (Gailbreath, Wagner, Moffett, & Hein, 1997). As one rises through the organizational hierarchy, the amount of power one has over the environment

increases, and thus the more likely one may be to effectively utilize a Situational Engineer approach. Similarly, leaders in organizations at different stages of the organizational life cycle may have differing tendencies to use these strategies. For example, leaders of start-up companies may have significant control over their environments and thus may have a greater tendency to use a Situational Engineer approach. In contrast, leaders in an older and more established company may have less control over their environments, and thus may be more likely to implement Behavioral Chameleon strategies. Such issues were not addressed in the current research, and would be important in order to further develop the concepts explored in this dissertation.

The current study is also limited by its focus only on the leader. The interaction between leaders and followers is an important theme in modern leadership theory (Hollander, 1978). Leaders do not use Situational Engineer and Behavioral Chameleon strategies in a vacuum. Future research examining subordinate reactions to each strategy would be important. The manner in which subordinates react to the use of these strategies may have a major impact on the success of these strategies. For example, Situational Engineer strategies may be more likely to succeed if subordinates have high levels of behavioral flexibility. In contrast, subordinates with low levels of behavioral flexibility may have difficult adjusting to the changes in their environment brought about by the use of a Situational Engineer approach.

Furthermore, recent research indicates that individuals at varying levels in the organizational hierarchy may view leadership actions very differently. For example, in a recent study of ratings of leadership effectiveness, Hooijberg and Choi (2000) found that "depending on the organizational role relationship between rater and ratee, different

leadership roles are associated with effectiveness" (p. 361). Similarly, Crant and Bateman (2000) suggest that some proactive behaviors that the manager's supervisor views as positive may be viewed negatively by the manager's subordinates. Subordinates may view a manager who exhibits too much behavioral flexibility as inconsistent, whereas supervisors may view such changes as appropriate responses to situational pressures (Hooijberg, 1996). It would be important for future research to consider perspectives from individuals in different levels of the organizational hierarchy when exploring the effectiveness of Behavioral Chameleon and Situational Engineer strategies.

A final potential limitation is the lack of performance criteria against which the effectiveness of the two strategies, or combinations of the two strategies, could be judged. Although the findings demonstrate that there are relationships between individual differences and the self-reported tendency to use these strategies, the relationship of these strategies to *effective* leadership performance is a fundamental question not addressed in this study. An important direction for future research would be to examine whether one strategy or the other is generally more effective and to explore the contextual factors that might affect the success of each strategy. It is possible that the success of the Situational Engineer approach is more constrained by the extent of the leader's control over the environment, whereas the success of the Behavioral Chameleon approach is more constrained by the extent of the leader's behavioral repertoire and sensitivity to the environment.

Conclusions

Buss (1989) points out that two different implicit models underlie much of the research on the relationship between personality and situations. One model views

individuals as passive receivers of environmental inputs, whereas the other model asserts that individuals are able to actively determine their environments. Like many other fields of psychological study, the field of leadership incorporates theories based on similar assumptions regarding the relationship between persons and their environments, as well as assumptions regarding the flexibility or inflexibility of human behavior. While a great deal of research has been conducted on theories of leadership that prescribe either environmental manipulation or behavioral flexibility as the path to effective leadership, these two strategies have not been integrated. Therefore, individuals looking for practical advice on how to encourage leader effectiveness are faced with mixed suggestions. This dissertation attempted to initiate a resolution to this problem by integrating the two themes within a person-environment framework as different strategies that may both lead to effective congruence with environmental demands.

The empirical study presented in this dissertation provided some evidence for the existence of these two strategies. Overall, the results indicate that individual differences have an impact on the extent to which individuals say they would be likely to use Behavioral Chameleon and Situational Engineer strategies to leadership environments. Further research on the individual differences underlying each approach, as well as the advantages and disadvantages of each strategy may lead to applications for the selection and development of organizational leaders. Research focusing on the effectiveness of the two strategies, and the boundary conditions that affect their success, would be particularly useful for the development of practical applications of the concepts explored in this dissertation. However, the results also suggested that the two strategies might be more related than was previously thought. Therefore, it may be productive for future

research to focus on active strategies to leadership environments, in which Behavioral Chameleon and Situational Engineer behaviors are viewed as connected strategies.

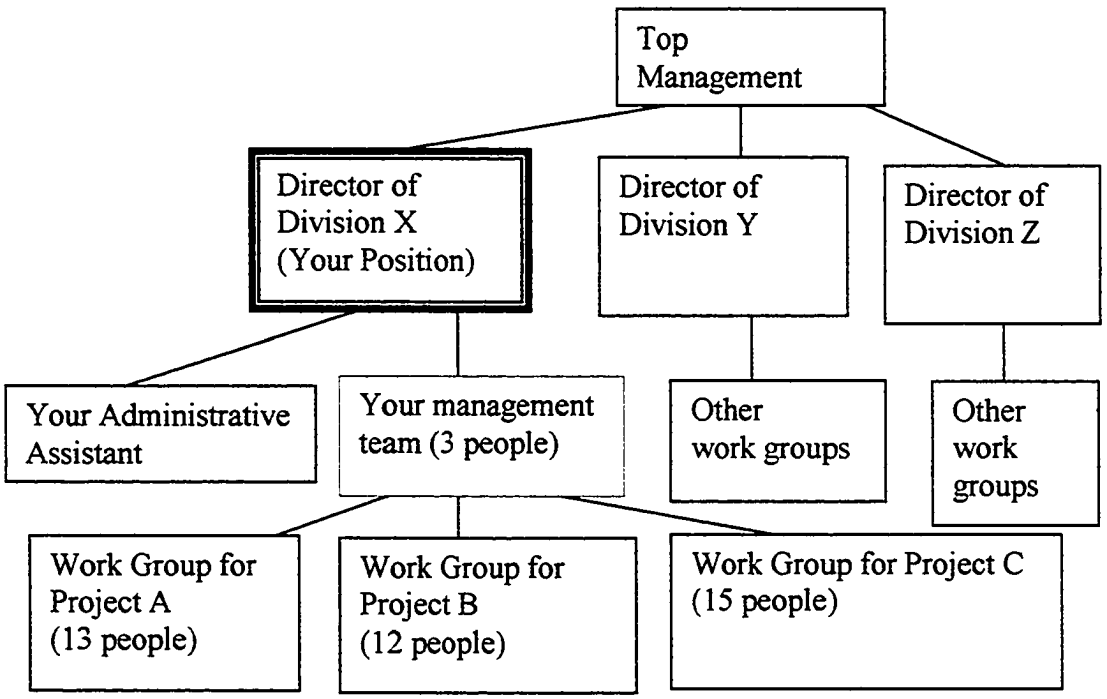
APPENDIX

Managerial Decision Making Task

* indicates items used to compute Behavioral Chameleon Scores.
** indicates items used to compute Situational Engineer Scores.

BACKGROUND

You have just accepted a hypothetical high-power managerial position as a Division Director overseeing three different projects. The projects assigned to this work group are considered to be essential for the continued success of the entire organization. Therefore, there is a lot of pressure on you and your division to succeed. You will be held ultimately responsible for all decisions made by work groups in your in your division. You have the authority to make any changes you feel are necessary in the personnel (hiring, firing, promotions, demotions, etc.), structure (reporting relationships, assignment of tasks, etc), and decision making processes (participative, directive, consultative, etc.) of your work group. Currently you and your management team oversee 40 employees assigned to the three projects. Thirteen of these individuals are responsible for the first project, twelve are involved in the second project, and fifteen are assigned to the third project. In addition, you have an administrative assistant working for you. A highly simplified organizational structure of the company looks like this:



INSTRUCTIONS

During this exercise, you will be presented with "real-life" leadership and managerial situations, which you must handle. You should read each situation and decide how likely you would be to take each approach listed in order to handle the situation. Important Note: This is not a test of your skills or intelligence, and there are no right or wrong answers.

Managerial Decision Making Task (continued)

Situation #1:
You have just started your new job as Division Director, and you are trying to decide how to organize and manage your division. Although your management team and work groups are fully staffed, you have been given some flexibility in your authority to transfer individuals to other parts of the organization and bring in new employees for your three work groups.

Please rate how likely you would be to take each approach to handle Situation #1:

Approach	Very Unlikely	Somewhat Unlikely	Neither Likely nor Unlikely	Some what Likely	Very Likely
A. Analyze whether the style of management you used in previous managerial positions would still work and attempt a new approach if you did not think the old style was appropriate.	1	2	3	4	5
B. Staff the division with individuals who you believe will work well with your usual management style.**	1	2	3	4	5
C. Adjust your management style to that which you have been told is typically used with work groups in this organization.*	1	2	3	4	5
D. Give more responsibility to individuals who work well with your usual style of management.	1	2	3	4	5

Managerial Decision Making Task (continued)

Situation #2: Project A

The previous Division Director tended to involve all employees assigned to this project in every decision that might affect them. All decisions on this project were made by consensus. However, the consensus decision making greatly slowed the decision process. Furthermore, some of the decisions that these employees made were of a poor quality. In several cases, these poor-quality decisions could be traced to two highly influential employees who appear to lack the necessary knowledge base to effectively contribute to the decision making process. You, personally, have a high degree of technical competence in the technology that this group uses.

Please rate how likely you would be to take each approach to handle Situation #2:

Approach	Very Unlikely	Somewhat Unlikely	Neither Likely nor Unlikely	Some what Likely	Very Likely
A. When making decisions, consult all employees assigned to this project, but only seriously listen to the people you view as competent.*	1	2	3	4	5
B. Make most of the important decisions for this project yourself, since you are highly knowledgeable in this technology and comfortable with your competence.	1	2	3	4	5
C. When making decisions, only consult those individuals who you feel are competent.*	1	2	3	4	5
D. Carefully monitor the individual contributions of each employee and provide greater compensation to those who are more productive and competent.**	1	2	3	4	5
E. Develop a training program for the two problem employees to improve their technical competence.	1	2	3	4	5

Managerial Decision Making Task (continued)

Situation #3: Project B

You don't know very much about the people working on this project yet. You are unsure of how much involvement in decision making that this group is used to and you do not know very much about their skills, abilities, or competence. The only major information you have received is that this work group needs to greatly increase its productivity and the speed at which decisions are reached or progress will be slowed significantly. You are having your first meeting with members of this group in order to learn more about them and develop a strategy for managing their work.

Please rate how likely you would be to take each approach to handle Situation #3:

Approach	Very Unlikely	Somewhat Unlikely	Neither Likely nor Unlikely	Some what Likely	Very Likely
A. Seek information on ways the previous Division Director successfully used his power and authority with this group and follow similar patterns for exercising your official authority.*	1	2	3	4	5
B. Clearly state your managerial style and expectations for group performance.**	1	2	3	4	5
C. Determine whether you could modify the work group to be similar in structure and functioning to successful groups you have managed in the past.**	1	2	3	4	5
D. Ask for input on what these subordinates expect from their leader and adjust your behavior to the expectations of the group.	1	2	3	4	5
E. Give a member of the group, who works well with your usual managerial style, the official authority to act as the leader of this project.**	1	2	3	4	5
F. Attempt to adjust your management style to one with which the current leader of this group is comfortable.	1	2	3	4	5

Managerial Decision Making Task (continued)

Situation #4: Project C

Individuals working on this project were a group of mavericks who were generally given a lot of freedom by the previous Division Director. They were able to make many autonomous decisions about their work processes and procedures. However, you have had problems coordinating this project with the other projects you manage. Your initial attempt to integrate this project with other work groups has been met with a great deal of resistance. These individuals seem sullen and resentful whenever you attend one of their meetings. Every time you have issued them a directive, you hear rumors of how they complain about your "interference" and how they try to get around any new rules and procedures that you implement. You get the sense that they have begun to seriously impair the functioning of your work unit through their resistance to change.

Please rate how likely you would be to take each approach to handle Situation #4:

Approach	Very Unlikely	Somewhat Unlikely	Neither Likely nor Unlikely	Some what Likely	Very Likely
A. Give more authority to those individuals who have been more willing to cooperate with you.**	1	2	3	4	5
B. Give this team the autonomy to make important decisions when you believe they are capable of handling the issue at hand.	1	2	3	4	5
C. Call a meeting with the group in which you outline the ways in which these employees must change their behavior if they are to be an effective work team.	1	2	3	4	5
D. Develop a performance evaluation system that includes an assessment of cooperation with management and cooperation with other departments. Use this system to record the lack of cooperation of these individuals in case you have to take disciplinary action against them.**	1	2	3	4	5
E. Break up the resistance of the team by transferring some of the more stubborn members to other work groups and bring in individuals who you know will be more cooperative. **	1	2	3	4	5
F. Spend a lot of time discussing your decisions with these employees so they can understand why you made the decisions you made.	1	2	3	4	5
G. Offer an end of the year bonus if these individuals are able to increase their cooperation and successfully coordinate efforts with the rest of your division.**	1	2	3	4	5

Managerial Decision Making Task (continued)

Situation #5: Your Management Team (Problem #1)

One member of your management team, who is in a key technical position, has been unable to adjust to changes in technology at a pace that you expect. As a result, the productivity of one of your work groups is suffering.

Please rate how likely you would be to take each approach to handle situation #5:

Approach	Very Unlikely	Somewhat Unlikely	Neither Likely nor Unlikely	Some what Likely	Very Likely
A. Utilize your extensive knowledge of this technology and adopt a directive management style in which you make decisions for this member of your management team so that his lack of technical skill doesn't hurt the project.*	1	2	3	4	5
B. Assign another member of your management team who is competent in this technical area to work with this employee to make sure that his lack of knowledge does not hurt the project.**	1	2	3	4	5
C. Make an inspirational appeal to try to get this employee excited about the projects he is working on enough to where he will work hard on his own to increase his level of knowledge.	1	2	3	4	5
D. Since you don't trust his competence, do not ask for his input when you need to make decisions. Instead, obtain the information you need from someone else.*	1	2	3	4	5
E. Do not allow him to participate in the decision making process.*	1	2	3	4	5
F. Send him to a series of training programs to improve his knowledge base.	1	2	3	4	5
G. Transfer his important tasks to another member of the project team and give him less crucial tasks to work on.**	1	2	3	4	5
H. Assign another member of the project team to act as a mentor to this employee to increase his knowledge.	1	2	3	4	5

Managerial Decision Making Task (continued)

Situation #6: Your Management Team (Problem #2)

Because the success of the organization is heavily dependent on the success of your unit, and because of the high mobility for individuals in your position, you have decided to develop a successor for your position. One member of your management team, stands far above the rest in terms of her technical knowledge and managerial skills. However, when you approached her about grooming her as a successor, she turned down your offer. Currently she is highly involved in a project that she enjoys very much, and she does not want to give up these activities and replace them with managerial and administrative duties. Although you have a number of competent people on your team, you do not believe any of them could lead the group as successfully as this employee would. In addition, you personally believe she would enjoy the position if she decided to take it.

Please rate how likely you would be to take each approach to handle Situation #6:

Approach	Very Unlikely	Somewhat Unlikely	Neither Likely nor Unlikely	Somewhat Likely	Very Likely
A. Assign her work that will develop her managerial skills in the hopes that further exposure will increase her interest in the position.**	1	2	3	4	5
B. Accept her decision and choose another member of your group to groom as a successor.	1	2	3	4	5
C. Change your focus towards aggressively recruiting an individual from outside your group who you think will be a competent successor.*	1	2	3	4	5
D. Emphasize that the success of the organization rests on the shoulders of this department, and tell her that the department is unlikely to be as successful if someone other than her is chosen to run it.**	1	2	3	4	5
E. Offer her a higher salary and substantial bonuses if she chooses to engage in training and development activities in preparation for the managerial position.**	1	2	3	4	5
F. Involve both this employee and another member of your management team in training and development activities so that both will be qualified to fill your position.	1	2	3	4	5

Managerial Decision Making Task (continued)

Situation #7: Internal Conflict in the Project B Work Group

Two of your top performers are having serious problems working together. You have heard reports that they are constantly arguing and are no longer sharing information with each other. Unfortunately, it is necessary for them to work together in order to make progress on their work assignments. Recently, you witnessed an intense argument between these two employees in which they both made negative comments about the other's intelligence and competence.

Please rate how likely you would be to take each approach to handle Situation #7:

Approach	Very Unlikely	Somewhat Unlikely	Neither Likely nor Unlikely	Somew hat Likely	Very Likely
A. Ask these two individuals to include you in any meetings they have with each other so that you can mediate the conflict.	1	2	3	4	5
B. Adjust work assignments so that these two employees do not have to work together very often.**	1	2	3	4	5
C. Send both employees to a conflict management course offered by your company.**	1	2	3	4	5
D. Ask the two employees not to attend decision making meetings so that you can keep their conflict from affecting the decision making process.*	1	2	3	4	5
E. When you need their input on decisions, approach the two employees separately so that they will focus on giving you information, rather than arguing with each other.*	1	2	3	4	5
F. Bring the two individuals into your office and inform them that personal conflict at work is inappropriate and will not be tolerated. Tell them they must change their behavior.	1	2	3	4	5
G. Add a section to your performance evaluation system on interpersonal skills and inform the two employees that their performance evaluation will suffer if they continue their personal conflict.**	1	2	3	4	5
H. When these employees disagree about a decision, ask other members of the group for their input so you can understand whether it is a substantive disagreement, or if the two employees are just letting their conflict drive the disagreement.	1	2	3	4	5

Managerial Decision Making Task (continued)

Situation #8: Your Administrative Assistant

As time goes by, you realize that you have a problematic working relationship with your administrative assistant. He appears to be resentful whenever you assign him tasks, and you sense that he is working much slower than he could. Recently you asked him to prepare an important memo to be sent to the head of this organization. You emphasized that you needed to have the document prepared by the end of the day. However, he left without completing the memo and you had to finish it and send it yourself. This kept you from completing some tasks you were expecting to get done that day.

Please rate how likely you would be to take each approach to handle Situation #8:

Approach	Very Unlikely	Somewhat Unlikely	Neither Likely nor Unlikely	Some what Likely	Very Likely
A. Focus on building a positive relationship with your administrative assistant in the hope that he will do a better job for you if he likes you.**	1	2	3	4	5
B. Frequently check on him to make sure he is doing his job.*	1	2	3	4	5
C. Tell him that he cannot leave unless he has completed the work you have assigned to him for the day.**	1	2	3	4	5
D. Ask him what you can do to help him work more efficiently.	1	2	3	4	5
E. Offer him an end of the year bonus contingent on his job performance.**	1	2	3	4	5
F. Do not rely on him to get tasks done. Instead, do important tasks yourself so you don't have to worry about him creating problems for you.*	1	2	3	4	5
G. Hire another administrative assistant who you believe will do a better job.**	1	2	3	4	5

Managerial Decision Making Task (continued)

Situation #9: Your Management Team (Problem #3)

A member of your management team is having personal problems that appear to be affecting his judgment in the workplace. He constantly seems distracted and he is having difficulty making timely decisions. When he does make decisions, you question the appropriateness of the choices he makes.

Please rate how likely you would be to take each approach to handle Situation #9:

Approach	Very Unlikely	Somewhat Unlikely	Neither Likely nor Unlikely	Somewhat Likely	Very Likely
A. Give him only relatively unimportant work until he is able to get his life back in order.**	1	2	3	4	5
B. Assign another member of the team whom you trust to work with this employee in his decision making in order to insure that his personal problems do not interfere with the quality of decisions.**	1	2	3	4	5
C. Confront him about how his personal difficulties are affecting his judgment and ask him to take a few days off to sort out the problem.	1	2	3	4	5
D. Discuss with him the way his personal difficulties are affecting his judgment and refer him to your organization's Employee Assistance Program for counseling.	1	2	3	4	5
E. Assign his important tasks to another member of the group until he straightens out his problems.**	1	2	3	4	5
F. Temporarily adopt a directive leadership style in which you allow him little power to make important decisions on his own.*	1	2	3	4	5

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