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Persuasive behavior as a moderator of the relationship between strategic behavior and leadership effectiveness

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PERSUASIVE BEHAVIOR AS A MODERATOR OF THE RELATIONSHIP BETWEEN STRATEGIC BEHAVIOR AND LEADERSHIP EFFECTIVENESS

A Thesis

Presented to the

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ABSTRACT

Based on the notion that leader behaviors are mutually facilitative on their effects on leader effectiveness, this study tested the hypothesis that Persuasive behaviors moderate (enhance) the predictive relationship between Strategic behaviors and Leadership Effectiveness. The hypothesis was tested on three archival data sets of *Leadership Effectiveness Analysis Questionnaire* ™ (LEA) observer evaluations performed on leaders from 3 management levels (Senior N = 1,964, Middle N = 3,728, Low N = 813), diverse functional areas, industries and US states. Persuasive was identified as a significant ($p < .05$) moderator of the Strategic-Effectiveness relationship at the Senior and Middle management levels. Follow-up analysis indicated that Persuasive substitutes the effects of Strategic, particularly when this dimension is low, but does not enhance its predictive ability. Conclusion is made that Persuasive moderates (substitutes) the effects of Strategic and Effectiveness, depending on managerial level, and that Strategic constitutes a hallmark of leadership effectiveness.

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CHAPTER ONE

BACKGROUND

A large body of research and theory regarding the determinants of leadership effectiveness has accumulated over more than fifty years. Within various theoretical orientations, the behavioral approach has produced abundant evidence relating a variety of leader behaviors to leadership effectiveness. Based on the notion that leader behaviors interact and are mutually facilitative on their effects on leader effectiveness, this research studies the hypothesis that Persuasive behaviors moderate the relationship between a predictor (Strategic behaviors) and a criterion variable (Overall Leadership Effectiveness). The development of this study serves the purpose of clarifying the role of individual differences as they significantly differentiate high performing leaders from less effective ones. From a practical perspective the results of this study can be used to support the development of leadership improvement programs as well as succession planning and organizational selection decisions.

The proposition that the broad task-oriented and person-oriented categories of leader behavior predict

leadership effectiveness has been a fundamental part of the leadership research and theory. Evidence supporting this relationship is presented and following the progression of leadership theories, a series of studies looking closely at more specific leader behaviors and effectiveness outcomes are introduced. Specifically, the Strategic (taking a long-range, broad approach to problem solving and decision making through objective analysis, thinking ahead and planning) task-related behaviors and the Persuasive (building commitment by convincing others and winning them over to your point of view.) person-oriented behaviors are identified as key components of the leadership role, particularly as they relate to Overall Effectiveness (total impact in role, future potential and credibility with management). Based on the notion that Strategic and Persuasive behaviors interact in their effects, this study explores how does different combinations of these behaviors relate to leader effectiveness.

Task-Related and Person-Oriented Behaviors and Effectiveness Outcomes

Yukl's (2002) review of the behavioral approach to the determinants of leadership effectiveness reveals how

research and theoretical models backed on factor-analytic procedures, have commonly identified task-oriented and person-oriented categories as two distinct areas to classify leadership behaviors. Task-oriented behaviors are "primarily concerned with accomplishing the task, utilizing personnel and resources efficiently, and maintaining orderly, reliable operations" (Yukl, 2002, p. 65), while person-oriented behaviors are "primarily concerned with improving relationships and helping people, increasing cooperation and teamwork, increasing subordinate job satisfaction, and building identification with the organization" (Yukl, 2002, p. 65). Consistent with the identification of these two broad categories, Fleishman's (1991) review of 65 leadership behavior taxonomies developed between 1944 and 1986, indicates that "in nearly every classification system, dimensions are proposed focusing on a) the facilitation of group social interaction, and b) objective task accomplishment" (p. 253), which according to the author are similar to the consideration and initiating structure dimensions. According to Fleishman and Harris (1962), leader behaviors within the consideration dimension include finding time to listen to subordinate's problems, consulting with subordinates on important matters, being willing to accept

subordinate suggestions and encouraging more two-way communication. Distinctively, behaviors within the initiating structure dimension include emphasizing the importance of meeting deadlines, assigning subordinates to tasks, maintaining definite standards of performance, offering new approaches to problems, coordinating the activities of different subordinates, planning ahead and pushing for production (Fleishman & Harris, 1962).

Extensive research has been conducted relating these two broad leader behavior categories to effectiveness outcomes. Three representative studies of the relationships between initiating structure and consideration and different outcome variables are briefly presented. A study conducted by Greene (1973) collected data on leader initiating structure and consideration as measured by the Leader Behavior Description Questionnaire (LBDQ) and performance data, concluded that consideration results in subordinate satisfaction and found no evidence of significant relationships between initiating structure and subordinate satisfaction. Dawson et al (1972) experimentally manipulated consideration and initiating structure, finding that both leader behaviors produced positive effects over the productivity of work group members. Also within an experimental approach, Hand and

Slocum (1972) identified that increased consideration yielded significantly better performance, measured by supervisor ratings. Although these findings reveal significant effects of these two leadership dimensions over different outcome variables, it is important to reference Korman's (1966) and Kerr and Schriesheim (1974) conclusions regarding this research area. Following their review of representative studies at that time, the authors indicated the need to conduct further research exploring whether these relationships were moderated by situational conditions as well as the need to refine and improve the psychometric properties of the scales used to measure initiating structure and consideration.

Fleishman and Harris's (1962) study provides evidence relating these two dimensions and their interaction, and two primary indices of group behavior: labor grievances and employee turnover. Empirical support was found for the idea that increased consideration is related with reduced turnover and grievance rates, while high structure is associated with increased turnover and grievances rates. Based on data collected through independent measures of these leadership dimensions, grievances and turnover on fifty-seven production foremen, negative correlations were found between consideration and grievances and turnover

(r = -.51 and r = -.69 respectively). Also, positive correlations were found to be descriptive of the relationship between structure and grievances and turnover (r = .71 and r = .63 respectively). While these findings support the idea of a significant relationship between these two behaviors and two distinct indices of group effectiveness, the authors also identified that different combinations of initiating structure and consideration have different effects over employee turnover and grievances rates. There is a difference on grievance rates between leaders with low scores on structure, compared to those with high scores on structure, depending on consideration. Leaders with low consideration and low structure had a higher grievance rate compared to leaders with low consideration and high structure scores. Indicative of an interaction between the two variables, leaders with high consideration and low structure had a lower grievance rate compared to leaders with high consideration and high structure scores. According to the authors, this situation indicates that consideration is the dominant factor where high consideration can compensate for the effects of high structure over grievances rates but low structure will not offset the effects of low consideration.

A study conducted by Gilmore, Beehr and Richter (1979) examined the effects of structure and consideration on the performance and satisfaction of subordinates. Based on data collected from a study involving 48 participants assigned to four experimental conditions (low consideration-low structure, high consideration-low structure, low consideration-high structure, high consideration-high structure) the authors concluded that high initiating structure behaviors are significantly related to increased quality and quantity of work. Through the manipulation of the consideration dimension, the authors identified a significant structure by consideration interaction, $F\ (1, 47) = 6.62$, $p < .05$. Their findings indicated that high levels of both structure and consideration resulted in significantly higher scores on a quality index than for the condition of a leader displaying high Structure combined with lower consideration.

At a later stage within this area of research, Edwards's (1988) meta-analysis involving studies relating initiating structure and consideration to measures of leader effectiveness such as job performance, job satisfaction, organizational stress and negative organizational outcomes, identified that

relationship-oriented behaviors are associated more closely with leader effectiveness than are task-oriented behaviors. Acknowledging these findings, the author concluded that "the considerable research attempting to demonstrate consideration and initiating structure effects on leadership effectiveness has yielded mixed results and definite conclusions are scarce" (Edwards, 1988, p. 201). Within these lines, he states that the relationships between leader behavior and leader effectiveness tend to be situationally specific, justifying the need for further research on this issue as well as further refinement on the description and explanation of leadership behaviors.

Strategic and Persuasive Behaviors and Leadership Effectiveness

While the behavioral dimensions of initiating structure and consideration received many years of attention in the literature, more recent research suggest that we need to look more closely at specific leader behaviors to learn more about leadership effectiveness. Four distinct behaviors have been commonly identified as critical to leader effectiveness in recent leadership taxonomies: planning and decision-making within the task-related category, and influence behavior and building commitment within the person-oriented category.

Fleishman's (1991) review of leadership behavior taxonomies, points out that parallel to the emergence of cognitive psychology, between the mid 70's and mid 80's, leadership classifications began to include behaviors such as, planning and decision making. Yukl (2002) observed that in an effort to gain descriptive accuracy when explaining the determinants of leadership effectiveness, more specific behaviors such as decision-making and planning were represented in most of the classifications that have been developed during the last thirty years. Parallel to the emergence of these two task-oriented behaviors, recent leadership taxonomies commonly include behaviors such as influencing and building commitment, which importance within the leadership role is emphasized as they relate to employee and organizational performance. In reference to the presence of these two person-oriented behaviors in recent leadership behavior taxonomies, Yukl (2002) points out that one of the most important determinants of managerial effectiveness is success in influencing people and developing commitment to task objectives.

Although the literature consistently recognizes that decision-making and planning behaviors are critical to organizational effectiveness, there is little agreement on

their conceptualization. The importance of the decision-making and planning behaviors is stressed by Harrison and Pelletier (1998) when they suggest that strategic decisions represent the most important product of managerial endeavors, as they "set the tone and tempo for every individual and unit in the organization" (p. 147). From the authors' perspective, strategic decisions commit the efforts of all the organization to the attainment of its long-range objectives. Also indicating its impact over the organization as a whole, Richardson (1994) introduces strategic decision making as "the providence of top management who deliberately and systematically pre-plan developments to ensure that the organization develops a process concerned with choices on long-term effect, major resource committing and developments" (p. 31). Pointing out the general character and long-range scope of this managerial activity, Simons and Thompson (1998) state that "the decision-making process involves the setting of goals or plans for organizational growth and ascertaining the feasibility of long-term plans" (p. 14). Within the same lines, Ansoff (1991) defines the leader's role as a planner of the medium to long-term development of the organization and stresses that the leader designs strategic developments by

formulating strategy in a controlled and conscious process of thought. In summary, these conceptualizations relate decision-making and planning behaviors to strategy and qualify them as key components of the leadership role, impacting the whole organization by defining strategy, providing direction, deciding what needs to be achieved and setting courses of action.

Barry and Shapiro (1992) define the influence behavior as "actions that people take to change the attitudes, beliefs, or behaviors of target individuals" (p. 1429), which can be classified in three distinct categories: "(a) hard tactics, involving direct assertive requests for compliance; (b) soft tactics involving the use of flattery and friendliness; and (c) rational tactics, involving the application of bargaining and logic" (p. 1430). In an exploratory investigation of the influence tactics used by managers, Gupta and Case (1999) found that presenting facts and ideas in a rational manner is the most commonly used lateral and upward influence approach. Similarly, (Yukl, Falbe & Youn 1993) found that rational persuasion, where the leader uses logical arguments and factual evidence as the primary vehicle for persuasion was the most often used tactic, both in downward and lateral influence attempts.

Regarding the sequence and patterns in which the influence tactics are used, Yukl, Falbe and Youn (1993) found that the initial influence attempts consist of simple requests, rational persuasion, ingratiation and personal appeals. Their results also indicated that, exchange and legitimating are most often used during immediate follow-up influence attempts and that tactics such as coalitions and pressure were used more in delayed follow-up influence attempts. Consistent with these findings, Yukl and Tracey (1992) identified that the use of socially desirable approaches resulted in more positive outcomes than when less socially desirable tactics were used.

In addition to planning, decision-making and influence behaviors, the relevance of building commitment to task objectives has also been emphasized as a prevalent component in recent leadership taxonomies. According to Singh and Vinnicombe (2000), commitment has been commonly conceptualized as: identification (pride in the organization and the internalization of its goals and values, involvement (psychological absorption in the actives of one's role for the good of the employing organization) and loyalty (affection for and attachment to the organization; a sense of belongingness manifested as a

wish to stay). From the authors' perspective, the Organizational Commitment Questionnaire (OCQ) conceptualizes commitment as three sub-concepts: employee's desire to remain in an organization, willingness to exert effort on its behalf and acceptance of the values and goals of the organization. In studying the meanings associated with commitment, Singh and Vinnicombe (2000) concluded that among managers, commitment meanings are associated with task or objective delivery, and putting yourself out/doing the extra, while the continuance element operationalised as one of the two key aspects of commitment previously, seems no longer to be an important aspect. Focusing on the attitudinal conceptualization of commitment in their studies, Allen and Meyer (1990) found that it correlated negatively with employee turnover. From their perspective committed individuals will work hard for the good of the organization. Consistent with these findings, Guest (1987) states that "commitment towards the organization results in less absenteeism and lower labor turnover, which coupled together lead to improved performance for the organization" (p. 510).

According to Yukl (2002), most of the researchers have studied the determinants of leadership effectiveness

in terms of the effects of the leader's actions over his/her followers and organizational results. Within this approach, it is stated that the most common objective measure used is the extent to which the leader's organizational unit attains its goals, while a typical subjective measure includes ratings of effectiveness obtained from the leader's superiors, peers or subordinates. An example of the existing link between a leader's actions and an objective measure of leadership effectiveness is provided by Wood and Robertson (1997), as they provide empirical evidence supporting the idea that a firm's export success is positively associated with a proactive strategic orientation and negatively associated with a reactive strategic orientation. According to the authors, a proactive strategic management orientation is characterized by the belief that the organization can affect its own destiny through the analysis of opportunities and threats, while the reactive strategic orientation is short-term oriented and places little value on formal planning.

Empirical evidence supporting the relationship between decision-making and planning behaviors and a subjective measure of leader effectiveness is provided by Kim and Yukl's (1995) field study. With a sample including

296 middle and upper-level managers the authors found significant correlations ($p < .01$) between planning/organizing and problem solving and both effectiveness and advancement. While most of the factors of their model were positively correlated with the output variables, the authors particularly pointed out that planning/organizing (determining long-term objectives and strategies, allocating resources according to priorities, determining how to use personnel and resources efficiently to accomplish a task or project, and determining how to improve coordination, productivity and effectiveness) and problem solving (identifying work-related problems, analyzing problems in a systematic but timely manner to determine causes and find solutions, and acting decisively to implement solutions and resolve crises), as measured by the Managerial Practices Survey (MPS) questionnaire, were the best predictors for both advancement and effectiveness scales. In reference to this finding, the authors concluded that " managers with strong technical expertise who plan and organize the activities of their work unit and use decisive, innovative problem solving are more likely to be viewed as competent, responsible and promotable" (Kim & Yukl, 1995, p. 374).

Additional evidence relating planning and decision-making behaviors to leadership effectiveness is provided by Kabacoff (2000). Based on a sample of 172 managers, using 360-degree data, he reported an r = 0.46 between the Strategic behavior (taking a long-range, broad approach to problem solving and decision making through objective analysis, thinking ahead and planning), as measured by the Leadership Effectiveness Analysis (LEA) questionnaire, and 3 anchored rating scales of overall leadership effectiveness, filled by direct reports. He also reported an r = 0.40 from the boss perspective and an r = 0.44 from the peer perspective, suggesting a stable correlation between Strategic and perceived overall leadership effectiveness across observer groups. Consistent with this evidence of association between Strategic and overall leadership effectiveness, based on a study involving 886 boss, 2540 peers and 3294 direct reports evaluating 2493 senior managers, Kabacoff (1999) concluded that with regard to overall effectiveness, all three observer groups agreed that highly effective individuals had high scores on the strategic behavior. In this study, higher scores in the strategic behavior distinguished between highly and less effective

individuals, consistently and in a statistically significant manner ($p < 0.5$), across rater groups.

Examining the idea that effective leadership depends on person-oriented dimensions, Kim and Yukl (1995) identified that the motivating/inspiring (using influence techniques that appeal to logic or emotion to generate enthusiasm for the work, commitment to task objectives, and compliance with requests for cooperation, resources or assistance; also setting an example of proper behavior) dimension as measured by the Managerial Practices Survey (MPS) questionnaire, significantly predicts effectiveness and advancement. Showing the relevance of this behavior to leadership effectiveness, the authors concluded that "managers who communicate clear task objectives and build commitment to them among subordinates are likely to be perceived as good prospects for promotions to positions of higher authority" (Kim & Yukl, 1995, p. 374).

Additional evidence establishing the link between the influence and building commitment behaviors to a subjective measure of leadership effectiveness is provided by Kabacoff (1999). He identified that the persuasive (building commitment by convincing others and winning them over to your point of view) behavior, consistently and reliably differentiated superior leaders from less

effective ones. Based on the analysis of 363 CEOs and 755 Senior Vice Presidents' 360-degree leadership evaluations, the author concluded that bosses, peers and direct reports agreed that the persuasive behavior, as measured by the Leadership Effectiveness Analysis (LEA) questionnaire, characterized effective leaders. Consistent with this evidence, based on a study involving 886 boss, 2540 peers and 3294 direct reports evaluating 2493 senior managers, Kabacoff (1999) concluded that with regard to overall effectiveness, all three observer groups agreed that highly effective individuals had high scores on the persuasive behavior. In this study, higher scores in the persuasive behavior distinguished between highly and less effective individuals, consistently and in a statistically significant manner ($p < 0.5$), across rater groups.

The Strategic and Persuasive Interaction and Leadership Effectiveness

Based on the evidence presented, it can be stated that both Strategic and Persuasive behaviors, are strong predictors of leadership effectiveness, however little can be said regarding their joint effect. How does different combinations of these behaviors relate to leader effectiveness and which is their optimum combination are

questions requiring further examination. In regards to testing an interaction between leadership behaviors, Yukl (2002), points out that some theorists have assumed that task-related and person-oriented behaviors "interact and are mutually facilitative in their effects on subordinates" (p. 59) but in reference to this kind of research initiative, he also states that the small number of studies testing for an interaction between task-related and person-oriented behaviors, have yielded inconsistent results.

According to Jacobs and Jaques (1990),"leadership is a process of giving purpose (meaningful direction) to collective effort, and causing willing effort to be expended to achieve purpose" (p. 281). While this definition stresses the relevance of providing direction, it also points out that leadership involves an influence process. Relating this twofold definition to effectiveness, it can be argued that while setting strategy, providing direction, making decisions and planning are key behaviors for a leader to be perceived as an effective one, this relationship can be enhanced by the leader's ability to influence others and develop followership. Understanding leadership as a social process, the importance of the leader's relationships with

other individuals becomes critical, as a mean to gain their cooperation, commitment and prolonged efforts toward the attainment of organizational goals (set direction and strategy). As stated by Gardner's 1993 theory of multiple intelligences, interpersonal knowledge permits an adult to read the intentions and desires of other adults and to act upon this knowledge to influence them to behave along a desired direction.

Although the strategic behavior is a strong predictor of leadership effectiveness, the absence of the persuasive behavior in a leader's behavioral repertoire may result in a reduction of his/her effectiveness. Research by Lombardo and McCauley, (1988), identified that managerial derailment often involved weak interpersonal skills. The authors specifically identified that managers who derail were usually weaker in interpersonal skills, less tactful and considerate, and less oriented to building cooperative relationships than successful managers. These findings and the evidence supporting a strong relationship between the strategic and persuasive behaviors and leader effectiveness, justifies the completion of further research addressing the question on whether the interaction between these two behaviors has a particular influence over leader effectiveness.

According to Podsakoff, MacKenzie, Ahearne, and Bommer (1995), when testing for an interaction or moderators in leadership, one option is to explore whether the observed interaction intensifies the impact of the leader's behavior on the criterion variable, or whether it changes the fundamental nature of the relationship. Focusing on the latter, Howell, Dorfman and Kerr (1986), point out that addressing the issue of changes in leader behaviors and corresponding changes in criteria, as well as providing information regarding differences in predictability, requires the use of a hierarchical multiple regression analysis. From their perspective, this statistical approach allows the identification of enhancers (moderators which strengthen the relationship between leader behavior and a criterion) or neutralizers (moderators which weaken the relationship between leader behavior and a criterion). According to the authors, such an approach, identifying form-type moderators "is of particular interest to leadership theorists and practitioners, since they provide information regarding how much of a change in leader behavior can yield a specified change in a criterion" (Howell, Dorfman & Kerr, 1986, p. 90). To further explore the question of how do different combinations of leader behaviors relate to

leader effectiveness, the following hypothesis is proposed.

H1: The relationship between the strategic behavior and perceived leadership effectiveness is moderated (enhanced) by persuasive behavior, such that a stronger positive relationship will be observed as a function of the increase on the persuasive behavior.

CHAPTER TWO

METHOD

Sample

The research hypothesis was tested on a 360-degree *Leadership Effectiveness Analysis* (LEA) archival data set. The sample consisted of three separate data sets of LEA observer evaluations performed between 1993 and 2002, on managers from diverse organizational levels, functional areas, industries and US states. The first data set consisted of 1,982 LEA Observer data entries (evaluations) of individuals at the senior management level. The second data set consisted of 3,785 LEA Observer data entries (evaluations) of individuals at the middle management level. The third data set consisted of 840 LEA Observer data entries (evaluations) of individuals at the low management level. Demographic characteristics of the observers and observed managers for each sample are provided in Tables 1 thru 4. Each sample size exceeds the 780 cases which according to Cohen's (1992) Power Primer, are required to detect a small size at power = .8 at α = .01 and 3 IVs.

Table 1. Manager Demographics. Individual Variables by Management Level

Demographic Variables	Senior Management (N = 1,982)		Middle Management (N = 3,785)		Low Management (N = 840)	
	f	%	f	%	f	%
Gender						
Male	1401	70.7	2468	65.2	505	60.1
Female	581	29.3	1309	34.6	334	39.8
Total	1982	100	3777	99.8	839	99.9
Missing			8	.2	1	.1
Ethnicity						
African American	50	2.5	100	2.6	29	3.5
Am Indian/Alaskan Nat.	7	.4	10	.3	4	.5
Asian/Pacific Islander	23	1.2	86	2.3	42	5.0
Hispanic	31	1.6	90	2.4	41	4.9
Caucasian	1800	90.8	3338	88.2	691	82.3
Total	1911	96.4	3624	95.7	807	96.1
Missing	71	3.6	161	4.3	33	3.9
Education						
Grades 1-8	2	.1	5	.1	3	.4
Grades 9-12	41	2.1	206	5.4	110	13.1
Tech/Vocational	23	1.2	109	2.9	68	8.1
2 years College	141	7.1	407	10.8	164	19.5
4 years College	771	38.9	1694	44.8	318	37.9
Grad School	939	47.4	1253	33.1	149	17.7
Total	1917	96.7	3674	97.1	812	96.7
Missing	65	3.3	111	2.9	28	3.3
Management level						
President/CEO	136	6.9				
Senior or Exec VP	534	26.9				
Division Head/VP	1312	66.2				
Department/Unit Manager			3785	100		
Supervisor/Foreman					840	100
Total	1982	100.0	3785	100	840	100

Table 2. Manager Demographics by Type of Business

Demographic Variable	Senior Management (N = 1,982)		Middle Management (N = 3,785)		Low Management (N = 840)	
	f	%	f	%	f	%
Type of Business						
Accounting/Banking/Finance	400	20.2	471	12.4	128	15.2
Business/Info Systems	72	3.6	103	2.7	8	1.0
Comm/Telecom	55	2.8	116	3.1	63	7.5
Computer/Office Equip	25	1.3	154	4.1	5	.6
Contracting/Construction	57	2.9	183	4.8	85	10.1
Education	38	1.9	57	1.5	12	1.4
Ent/Recreation/Sports	8	.4	18	.5	2	.2
Farming/Fishing/Forestry	1	.1	3	.1		
Food Products/Processing	40	2.0	41	1.1	3	.4
General Manufacturing	83	4.2	420	11.1	113	13.5
Government	135	6.8	104	2.7	41	4.9
Healthcare	219	11.0	342	9.0	71	8.5
Hospitality/Travel/Tourism	46	2.3	71	1.9	4	.5
Insurance	150	7.6	403	10.6	17	2.0
Law/Legal Services	5	.3	8	.2		
Mining/Oil/Gas/Chem	12	.6	43	1.1	14	1.7
Medical/Pharm Products	37	1.9	139	3.7	19	2.3
Printing/Publishing/Advert	25	1.3	36	1.0	7	.8
Real Estate/Land Dev	11	.6	12	.3	1	.1
Research/Scientific Serv	9	.5	49	1.3	13	1.5
Social Services	22	1.1	12	.3	7	.8
Transportation	34	1.7	30	.8	4	.5
Wholesale/Retail Trade	124	6.3	245	6.5	73	8.7
Utilities	44	2.2	100	2.6	39	4.6
Other	309	15.6	526	13.9	97	11.5
Total	1961	98.9	3686	97.4	826	98.3
Missing	21	1.1	99	2.6	14	1.7

Table 3. Manager Demographics by Functional Area

Demographic Variable	Senior Management (N = 1,982)		Middle Management (N = 3,785)		Low Management (N = 840)	
	f	%	f	%	f	%
Functional Area						
Accounting/Finance	200	10.1	283	7.5	46	5.5
Admin/Operations	704	35.5	966	25.5	150	17.9
Customer Service	60	3.0	251	6.6	109	13.0
Data Processing/Systems	75	3.8	199	5.3	40	4.8
Distribution/Fulfillment	19	1.0	89	2.4	52	6.2
HR/Personnel	111	5.6	194	5.1	19	2.3
Manufacturing	30	1.5	177	4.7	71	8.5
Marketing/Sales	374	18.9	519	13.7	41	4.9
Tech/Eng/Research	88	4.4	514	13.6	180	21.4
Other	284	14.3	525	13.9	119	14.2
Total	1945	98.1	3717	98.2	827	98.5
Missing	37	1.9	68	1.8	13	1.5

Table 4. Observer Demographics. Individual and Organizational Variables by Management Level

Demographic Variables	Senior Management (N = 17,431)		Middle Management (N = 32,833)		Low Management (N = 7,110)	
	f	%	f	%	F	%
Gender						
Male	10704	61.4	18664	56.8	3807	53.5
Female	5920	34.0	12604	38.4	2998	42.2
Total	16624	95.4	31268	95.2	6805	95.7
Missing	807	4.6	1565	4.8	305	4.3
Type						
Boss	2209	12.7	4300	13.1	949	13.3
Peer	7529	43.2	14280	43.5	3079	43.3
Direct Report	7693	44.1	14253	43.4	3082	43.3
Total	17431	100.0	32833	100.0	7110	100.0
Functional area						
Accounting/Finance	1771	10.2	2357	7.2	429	6.0
Admin/Operations	5321	30.5	7202	21.9	1167	16.4
Customer Service	616	3.5	2398	7.3	785	11.0
Data Processing/Syst.	630	3.6	1703	5.2	337	4.7
Distribution/Fulfill.	177	1.0	694	2.1	386	5.4
HR/Personnel	1014	5.8	1569	4.8	134	1.9
Manufacturing	211	1.2	1244	3.8	551	7.7
Marketing/Sales	2842	16.3	4079	12.4	381	5.4
Tech/Eng/Research	930	5.3	4762	14.5	1453	20.4
Other	2822	16.2	4815	14.7	1048	14.7
Total	16334	93.7	30823	93.9	6671	93.8
Missing	1097	6.3	2010	6.1	439	6.2

Procedure

The data set was obtained by sampling from an extensive archive of LEA Observer questionnaire evaluations maintained by MRG. These leadership

evaluations were completed in the course of ongoing organizational and managerial development programs. Each observer including boss, peer and direct reports completed the LEA Observer anonymously. The *Leadership Effectiveness Analysis* (LEA) is a descriptive, behaviorally oriented instrument, providing information on 22 dimensions of leadership behavior, grouped into six functional areas. The current study focused in only two of the LEA dimensions: strategic and persuasive. Descriptions of these dimensions are provided on Appendix A. Designed to provide developmental 360-degree feedback, the LEA includes self-report and observer report forms. While the self-report questionnaire is completed by the individual being assessed, the observer questionnaires are completed by the individual's boss, peers and direct reports. Both forms provide information on the same 22 leadership dimensions, including strategic and persuasive behaviors. The current study used data sets of observer evaluations only.

Measures

Leadership Behaviors

The LEA Self and Observer questionnaires include series of questions specifically assessing the examinee's

strategic and persuasive behaviors (11 questions for each dimension on the LEA observer questionnaire and 9 on the observer version). Both forms employ a normative/semi-ipsative forced choice format for item response. In the LEA each question includes a stem and three alternative options pertaining to a different leadership dimension. The respondent is required to choose first the option most characteristic of the person being assessed and to rate it as either a 5 or a 4. Following, the rater must select the option that is next most characteristic of the ratee and assign to it a 3 or a 2. Finally, the rater will leave the third option blank, and a score of 0 is assigned to this option. The LEA has demonstrated high test-retest reliabilities, low inter-scale correlations, and excellent construct and criterion-related validity in extensive large sample studies, as documented on the LEA: Technical Considerations by Kabacoff (1998). A brief description of some of the studies reported in this technical document is presented below.

Two separate studies using a test-retest approach were conducted in order to establish the LEA Self Questionnaire reliability. In the first study performed in 1991, with a 14 day interval, 44 people were administered

the LEA twice. In the second study performed in 1997, 35 people were administered the LEA twice within the same time interval. The average test-retest coefficient for the strategic behavior on the first study was .90 and .76 for the second study. The combined results for this dimension produced a test-retest reliability coefficient of .84. Also of relevance, the average test-retest coefficient for the persuasive behavior on the first study was .82 and .83 for the second study. The combined results for this dimension produced a test-retest reliability coefficient of .82.

Inter-rater reliability studies of the LEA Observer questionnaire were performed in 1997. Given the nature of 360-degree evaluations, differences among observer ratings and sufficient consistency in ratings to uncover trends in the behavior of the individual being rated are expected at the same time. Intra-class correlation coefficients (ICC) were used to estimate inter-rater reliability. ICCs for each rater group (boss, peer, direct report) as presented by Kabacoff (1998) LEA: Technical Considerations are presented in Tables 5, 6 and 7. Within the expected variation among raters, very acceptable levels of inter-rater reliability (moderate) were obtained. As the

number of raters combining their ratings increases, the reliability of these combined ratings increases too.

Table 5. Inter-Rater Reliability for Boss Leadership Effectiveness Analysis Observer Ratings

Scale	Number of raters 2	4	6
Strategic	.52	.69	.77
Persuasive	.57	.72	.80

Entries are intra-class correlation coefficients (ICCs). ICCs for 2 raters are based on the ratings of 534 individuals by 1068 bosses. ICCs for 4 and 6 raters are derived from the 2 rater results using the Spearman-Brown prophesy formula.

Table 6. Inter-Rater Reliability for Peer Leadership Effectiveness Analysis Observer Ratings

Scale	Number of raters 4	6	8
Strategic	.65	.74	.79
Persuasive	.65	.74	.79

Entries are intra-class correlation coefficients (ICCs). ICCs for 4 raters are based on the ratings of 648 individuals by 2592 peers. ICCs for 6 and 8 raters are derived from the 4 rater results using the Spearman-Brown prophesy formula.

Table 7. Inter-Rater Reliability for Direct Report Leadership Effectiveness Analysis Observer Ratings

Scale	Number of raters 4	6	8
Strategic	.65	.74	.79
Persuasive	.60	.70	.75

Entries are intra-class correlation coefficients (ICCs). ICCs for 4 raters are based on the ratings of 636 individuals by 2544 direct reports. ICCs for 6 and 8 raters are derived from the 4 rater results using the Spearman-Brown prophesy formula.

Examination of the LEA Self Questionnaire construct validity was performed with the use of descriptive discriminant analysis. The cases with complete LEA data (N = 24,345) were used as predictor variables and seven organizational levels as predicted variable. Clear and interpretable differences among group means were identified. The ability of the LEA Self Questionnaire to correctly position groups by organizational level on this study is interpreted as evidence of construct validity. This study revealed that as one moves from lower to higher organizational levels one tends to demonstrate greater persuasive and strategic behaviors. Using the same analytical technique, the 24,345 cases were used as predictor variables and a nine level job function classification was used as the predicted variable. Clear

and interpretable group differences by job function were obtained, providing further evidence of the construct validity of the LEA questionnaire.

The LEA Self Questionnaire predictive validity was explored on a sample of 6,146 individuals that had completed the questionnaire and had been rated by boss, peers and direct reports on the LEA Observer questionnaire. The 22 LEA leadership dimensions were used as predictor variables and the leadership effectiveness scales of the part B of the LEA Observer questionnaires were used as predicted variables in this study. Relationships between the self-reported leadership scores and the observer ratings of effectiveness were evaluated in a series of Chi-square tests. Every LEA dimension had a significant relationship with one or more effectiveness scales, yielding evidence of predictive validity for the LEA Self Questionnaire. Significant positive relationships ($p < 0.01$) were identified between strategic and boss, peer and direct report ratings of effectiveness. Significant positive relationships ($p < 0.01$) were also identified between persuasive LEA self scores and peer and direct report ratings of effectiveness.

In observance of the proprietary rights of the LEA Questionnaire, the items evaluating the strategic and

persuasive dimensions cannot be provided in this document, however 4 example items employed to assess each dimension are presented in Appendix A.

Leadership Effectiveness

The observer version of the LEA contains 20 graphically anchored rating scales assessing various aspects of leadership effectiveness on a 1 to 7 scale. Based on both factor analytic studies and rational considerations, according to Kabacoff (1998), these rating scales have been combined to yield 3 broader effectiveness measures: business skills (understanding financial issues, aptitude for business, and the ability to quickly get to the heart of issues) people skills (sensitivity to others, likableness, and ability to listen), and overall effectiveness (effectiveness in current position, future potential, and credibility with senior management). Based on a sample of N = 9,495 bosses a coefficient alpha of .83 was found for the 3 items overall effectiveness scale. Additionally, alpha coefficients of .81 and .82 for the overall effectiveness scale were found based on samples of N = 28,247 peers and N = 25,174 direct reports respectively. The overall effectiveness measure was selected as the criterion variable for this study as it differs in content and purpose from the LEA items

assessing the persuasive and strategic behaviors. While the overall effectiveness scale provides evaluative information about the individual's performance as a leader, the persuasive and Strategic items are strictly descriptive and provide information regarding the individual's display of these behaviors. Descriptions of the 3 overall effectiveness items of interest for the present study are provided on Appendix A.

CHAPTER THREE

RESULTS

Prior to beginning the statistical analysis, the variables of the LEA Observer Questionnaire data set by Management Research Group, were examined for missing data, univariate and multivariate outliers, and for the assumptions of linearity, homoscedasticity, normality and homogeneity of regression. The variables considered in this prescreening procedure were strategic, persuasive and overall effectiveness. For the analysis and data screening, overall effectiveness was considered as the dependent variable, while strategic and persuasive were treated as independent variables. Hierarchical multiple regression was employed to determine if persuasive moderates (enhances) the predictive relationship between strategic and overall effectiveness. Data screening, evaluation of assumptions and analysis was performed using SPSS REGRESSION, and SPSS FREQUENCIES. Data screening, evaluation of assumptions and statistical analysis were performed separately in three different data sets as follows. The senior management level data set consisted of 1,982 data points of LEA Observer Questionnaires, the middle management level data set consisted of 3,785 data

points of LEA Observer Questionnaires, and the low management level data set consisted of 840 data points of LEA Observer questionnaires.

For the senior management level data set, strategic and persuasive had complete data. Overall effectiveness had missing data on 18 cases (0.9%) which were not considered for the analysis. The variables were screened for univariate and multivariate outliers. Multivariate outliers were examined through the use of Mahalanobis distance with a criterion of $p < .001$. One multivariate outlier was detected. Given the large sample size, univariate and multivariate outliers were considered part of the distribution and kept for the analysis.

The assumptions of linearity and homoscedasticity were examined through examination of scatterplots of residuals and predicted scores. The distribution of the residuals scatterplot is symmetrical and centered around zero, indicating that the assumptions of linearity and homoscedasticity are met. The Strategic by Effectivenesss and Persuasive by Effectiveness bivariate scatterplots are oval-shaped, indicating that the variables are normally distributed and linearly related. After evaluation of the assumptions the major analyses were performed on 1,964 data entries.

For the middle management level data set, strategic and persuasive had complete data. Overall effectiveness had missing data on 57 cases (1.5%) which were not considered for the analysis. The variables were screened for univariate and multivariate outliers. Multivariate outliers were examined through the use of Mahalanobis distance with a criterion of $p < .001$. Six multivariate outliers were detected. Given the large sample size, univariate and multivariate outliers were considered part of the distribution and kept for the analysis.

The assumptions of linearity and homoscedasticity were examined through examination of scatterplots of residuals and predicted scores. The distribution of the residuals scatterplot is symmetrical and centered around zero, indicating that the assumptions of linearity and homoscedasticity are met. The strategic by effectivenesss and persuasive by effectiveness bivariate scatterplots are oval-shaped, indicating that the variables are normally distributed and linearly related. After evaluation of the assumption the major analyses were performed on 3,728 data entries.

For the low management level data set, strategic and persuasive had complete data. Overall effectiveness had missing data on 27 cases (3.2%) which were not considered

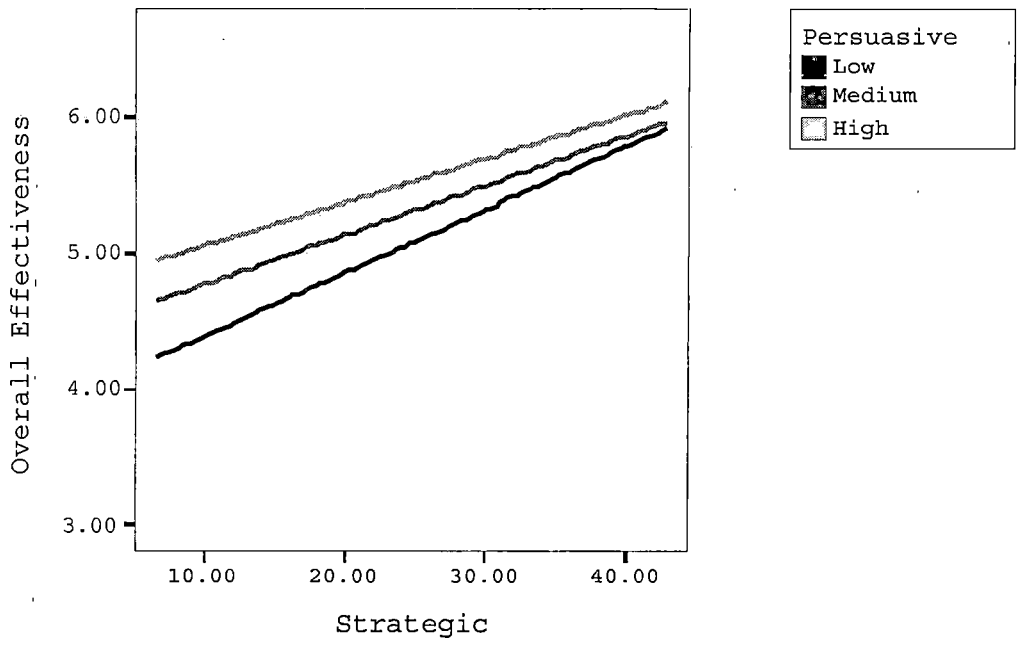
for the analysis. The variables were screened for univariate and multivariate outliers. Multivariate outliers were examined through the use of Mahalanobis distance with a criterion of $p < .001$. One multivariate outlier was detected. Given the large sample size, univariate and multivariate outliers were considered part of the distribution and kept for the analysis.

The assumptions of linearity and homoscedasticity were examined through examination of scatterplots of residuals and predicted scores. The distribution of the residuals scatterplot is symmetrical and centered around zero, indicating that the assumptions of linearity and homoscedasticity are met. The Strategic by Effectivenesss and Persuasive by Effectiveness bivariate scatterplots are oval-shaped, indicating that the variables are normally distributed and linearly related. After evaluation of the assumption the major analyses were performed on 813 data entries.

Hierarchical multiple regression was employed to identify if persuasive moderated (enhanced) the predictive relationship between strategic and overall effectiveness. Overall effectiveness was regressed on the persuasive and strategic dimensions in the first step and the strategic by persuasive cross product in the second step. According

to Howell, Dorfman and Kerr (1986), this statistical approach is the appropriate method for moderator detection, allowing the identification of enhancers (moderators which strengthen the relationship between leader behavior and a criterion) or neutralizers (moderators which weaken the relationship between leader behavior and a criterion).

For the senior management level data set, $\underline{R}$ was significantly different from zero after step 1, with strategic and persuasive in the equation. $R = .53$, $F\ (2, 1961) = 386.94$, $p < .01$. Overall effectiveness can be significantly predicted ($p < .01$) from a model containing strategic and persuasive. $\underline{R}^2 = .283$, Adjusted $\underline{R}^2 = .282$. 28% of the variance of overall performance is accounted for by strategic and persuasive. Step 2, added the strategic X persuasive interaction to the model, $\underline{R}^2_{change} = .002$, $F_{inc}\ (1, 1960) = 5.29$, $p < .05$, resulting in a significant increment in $\underline{R}^2$. 0.2% of the variance of overall performance is accounted for by the strategic X persuasive cross product. A significant interaction term suggests the presence of a moderator. As can be seen in Figure 1, the strength of the relationship between strategic and effectiveness, changes slightly, as a function of the different levels of persuasive. The



(low = 20th percentile or lower, medium = 21st to 79th percentile, high = 80th percentile or higher)

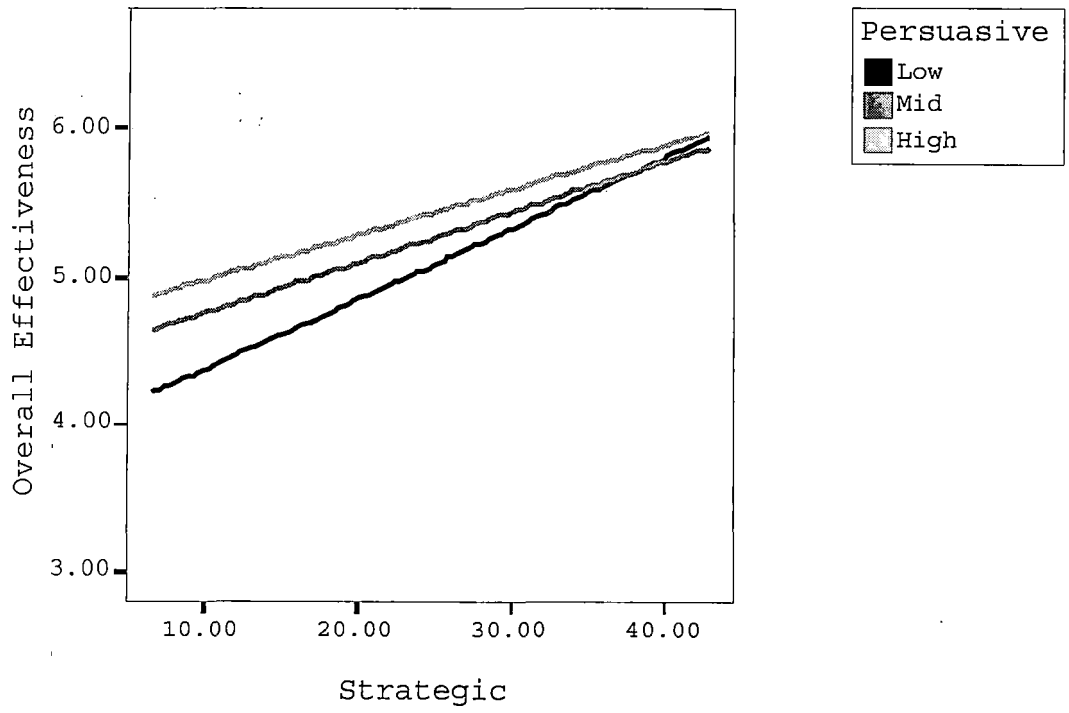
Figure 1. Senior Management Overall Effectiveness-Strategic Regression Lines by Low, Medium and High Persuasive

strongest relationship between strategic and overall effectiveness is observed for the low persuasive group. The strength of this relationship diminishes for those with medium persuasive scores and decreases even more for the condition with low persuasive scores. Increases in overall effectiveness appear to have been associated with increases in strategic combined with lower scores on the persuasive behavior. In other words, the observed interaction is suggestive that the relationship between strategic and overall effectiveness is stronger with the

presence of low persuasive scores and looses strength as persuasive increases. The hypothesis that persuasive moderates the relationship between strategic and overall effectiveness was supported, but the observed effect size was small and the moderator acted differently than expected. While persuasive was identified as a significant moderator, it doesn't act as an enhancer but rather as a substitute. Persuasive significantly moderates the predictive relationship of strategic and overall effectiveness as a substitute, as indicated by the performed split correlation follow-up analysis. A dichotomized (high/low) persuasive variable was created and correlations between strategic and overall effectiveness were run for the high and low conditions.

For the middle management level data set, $\underline{R}$ was significantly different from zero after step 1, with strategic and persuasive in the equation. $R = .48$, $F\ (2, 3725) = 562.42$, $p < .01$. Overall effectiveness can be significantly predicted ($p < .01$) from a model containing strategic and persuasive. $\underline{R}^2 = .23$, Adjusted $\underline{R}^2 = .23$. 23% of the variance of overall performance is accounted for by strategic and persuasive. Step 2, added the strategic X persuasive interaction to the model, $\underline{R}^2_{change} = .002$, $F_{inc}\ (1, 3724) = 11.23$, $p < .05$, resulting

in a significant increment in $\underline{R}^2$. 0.2% of the variance of overall performance is accounted for by the strategic X persuasive cross product. The significant interaction term and the observed effect size are suggestive of the presence of a moderating effect. As can be seen in Figure 2, the strength of the relationship between strategic and effectiveness, changes slightly as a function of the different levels of persuasive. Consistent with the



(low = 20th percentile or lower, medium = 21st to 79th percentile, high = 80th percentile or higher)

Figure 2. Middle Management Overall Effectiveness-Strategic Regression Lines by Low, Medium and High Persuasive

findings for the senior sample, the strongest relationship between strategic and overall effectiveness is observed for the low persuasive group. The strength of this relationship diminishes for those with medium persuasive scores and decreases even more for the condition with low persuasive scores. Increases in overall effectiveness appear to have been associated with increases in strategic combined with lower scores on the persuasive behavior. In other words, the relationship between strategic and overall effectiveness is stronger with the presence of low persuasive scores and looses strength as persuasive increases. Again, the hypothesis that persuasive moderates the relationship between strategic and overall effectiveness was supported and similar to the senior condition, the observed effect size was small and for the middle management sample, the moderator was found to act as a substitute too. This is suggestive that Persuasive significantly moderates the predictive relationship of strategic and overall effectiveness as a substitute, as indicated by the performed split correlation follow-up analysis. A dichotomized (high/low) persuasive variable was created and correlations between strategic and overall effectiveness were run for the high and low conditions.

Finally, for the low management level data set, $\underline{R}$ was significantly different from zero after step 1, with strategic and persuasive in the equation. R = .47, F (2, 810) = 112.60, $p < .01$. Overall effectiveness can be significantly predicted ($p < .01$) from a model containing strategic and persuasive. $\underline{R}^2$ = .22, Adjusted $\underline{R}^2$ = .22. 22% of the variance of overall performance is accounted for by strategic and persuasive. Step 2, added the strategic X persuasive cross product to the model, $\underline{R}^2_{change}$ = .0001, F_{inc} (1, 809) = .19, $p > .05$, which did not significantly increased $\underline{R}^2$. For this particular sample, there is evidence that persuasive does not significantly moderate the relationship between strategic and overall effectiveness.

CHAPTER FOUR

DISCUSSION

This study provides evidence clarifying the role of individual differences as they differentiate high performing leaders from less effective ones. Research exploring the question of how do different combinations of leader behaviors relate to leader effectiveness have yielded inconsistent results. To further explore this question and based on supporting evidence, it was hypothesized that persuasive behaviors would enhance the predictive relationship between strategic behavior and leader effectiveness. Persuasive was hypothesized to act as an enhancer based on the evidence establishing that its absence in a leader's behavioral repertoire may result in a reduction of his/her effectiveness. As identified by Lombardo and McCauley, (1988), managerial derailment often involved weak interpersonal skills, low tact and consideration and less of an orientation to building cooperative relationships. By the same token, persuasive was hypothesized to act as an enhancer based on the notion that the leader's ability to influence others and develop followership can enhance the impact of a leader's ability

to set strategy, provide direction, make decisions and plan, on perceived effectiveness.

After running the analysis, partial support was found for the proposed hypothesis. Although a significant interaction, identifying persuasive as a moderator of the strategic-effectiveness relationship was found, the observed effect size is small and the direction of the moderating effect is different than expected. The results indicate that persuasive doesn't enhance the strategic-effectiveness relationship but act as a substitute or as a supplement, depending on the organizational level.

The significance of the interaction effect is suggestive that overall effectiveness can be predicted from the strategic dimension, depending on the persuasive behavior. As depicted in Figure 1, for the senior management level, the strength of the relationship between strategic and overall effectiveness is stronger for those with low persuasive, followed by those with middle persuasive scores and weaker for those with high persuasive. The reduction in the strength of association suggests that persuasive act as neutralizer of the effects that strategic has over effectiveness; thus meeting the

first criteria for a moderator to be qualified as a substitute.

The differences between the three persuasive groups (high, medium, low) are different across the levels of strategic (greater for low strategic and smaller for high strategic). The differences in effectiveness are significantly greater when strategic is low compared to the high strategic condition. For the low strategic condition persuasive acts as a substitute, it reduces the influence of the strategic component over effectiveness, but replaces the effects of strategic with one of its own. In other words, persuasive makes up for the effects of strategic over effectiveness, for the low strategic condition. For the high strategic condition persuasive becomes less important and its ability to substitute for the effects of strategic is substantially reduced. In conclusion, the interaction effect between the two behaviors seems to take place when strategic is low.

Similar results were obtained after running the analysis on the middle management level sample, as depicted by Figure 2. Consistent with the observed results for the senior management level, the substitute effect played by the persuasive dimension is more prominent when strategic is low. For the middle management level, the

strength of the relationship between strategic and overall effectiveness is stronger for those with low persuasive, followed by those with middle persuasive scores and finally for those with high persuasive.

The observed reduction in the strength of association is suggestive that persuasive act as neutralizer of the effects that strategic has over effectiveness; thus meeting with the first criteria for a moderator to be qualified as a substitute. The differences between the three persuasive groups (high, medium, low) are different across the levels of strategic (greater for low strategic and smaller for high strategic) as depicted in Figure 2.

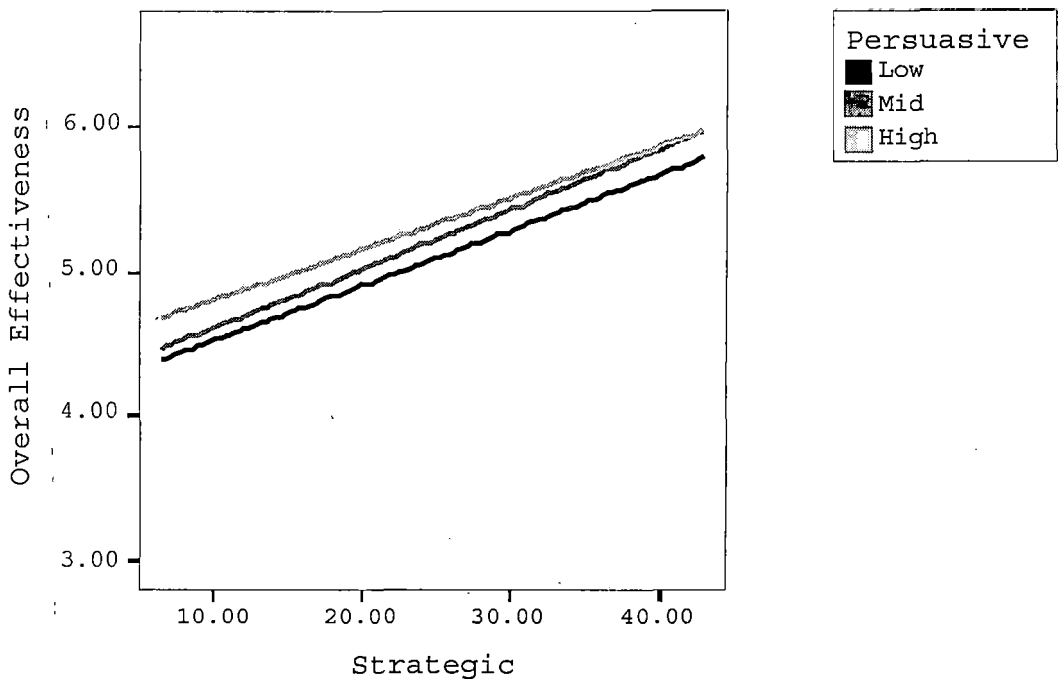
While it was hypothesized that persuasive would act as an enhancer, the observed interaction and follow-up analysis indicate that persuasive rather act as a substitute. According to Howell, Dorfman and Kerr (1986), enhancers influence the predictor-criterion relationship but do not meaningfully influence the criterion itself. The fact that persuasive by itself constitutes a strong and stable predictor of effectiveness prevents it from acting as an enhancer. Instead, persuasive neutralizes the strategic-effectiveness relationship first, and substitutes (replaces) the impact of strategic with its own effect. While persuasive acts as a substitute for the

low strategic condition, its effect of reducing the strategic-effectiveness association becomes more prominent and its ability to substitute for the effects of strategic is reduced for the high strategic condition. From this perspective, for the senior and middle management levels, the relevance of persuasive as a substitute of the strategic-effectiveness predictive relationship is more salient when the strategic behavior is low.

The decreasing importance of persuasive as it interacts with increasing values of the strategic dimension is suggestive that strategic constitutes a hallmark of leadership effectiveness. Although persuasive is an important predictor of leadership effectiveness, strategic is more important. As mentioned by Harrison and Pelletier (1998) strategic decisions represent the most important product of managerial endeavors, as they "set the tone and tempo for every individual and unit in the organization" (p. 147). Consistent with the literature review, the strategic dimension represents the distinguishing factor of an effective leader. Kim and Yukl's (1995) field study with middle and upper-level managers indicate that among the 14 leader behaviors measured by the Managerial Practices Survey (MPS) questionnaire, the planning/organizing and problem solving

(similar in content with strategic) dimensions presented the strongest significant correlations ($r = .38$ and $r = .34$ respectively) with leadership effectiveness. Consistent with these findings, Kabacoff (1999) concluded that with regard to overall effectiveness, higher scores in the strategic behavior distinguished between highly and less effective individuals, consistently and in a statistically significant manner ($p < 0.5$) across rater groups (boss, peer and direct report).

The results for the low management level sample are different. There is no significant interaction effect between strategic and persuasive. For each condition of persuasive (high, medium, low), strategic has the same positive impact on effectiveness, however the intercept increases as the value of persuasive increases. This situation requires qualifying the persuasive dimension as a supplement. While persuasive do not affect the impact of strategic on effectiveness, across strategic, higher scores of persuasive result in higher effectiveness levels, as depicted in Figure 3.



(low = 20th percentile or lower, medium = 21st to 79th percentile, high = 80th percentile or higher)

Figure 3. Low Management Overall Effectiveness-Strategic Regression Lines by Low, Medium and High Persuasive

The ability of persuasive to positively impact the outcome variable across the strategic values indicates the relevance of this behavior for the low management level. For this level, displaying a persuasive behavior, supplements the effects of strategic on effectiveness.

In light of further understanding the combined effects of leadership predictors over leader effectiveness, these findings have theoretical importance as they are suggestive that persuasive moderates the nature of the relationship between strategic and overall

effectiveness. While persuasive supplements the effects of strategic for the low management level, it substitutes the effects of strategic for the middle and high management levels. These findings are consistent with Howell, Dorfman and Kerr's (1986) statement that many moderator variables may sometimes serve as leadership substitutes and at other times as supplements.

How does different combinations of persuasive and strategic relate to effectiveness? As can be seen in Figures 1 and 2 the highest effectiveness values in senior and middle management levels are observed for those with high persuasive and high strategic, followed by those with medium persuasive and high strategic and finally by those with low persuasive and high strategic. The effects of persuasive as a substitute are stronger when the strategic dimension is low, thus indicating that the amount of strategic is the dominant factor and a hallmark of leadership effectiveness. Regarding the low management condition, the effects of persuasive and strategic are independent and that both behaviors are necessary to be an effective leader. For this group of managers, persuasive adds to prediction of overall effectiveness, beyond the effects of strategic.

The observed results are of practical importance for low level managers as the effect of the strategic behavior on overall effectiveness changes as a function of a higher presence of the persuasive behavior. From this perspective, efforts in training and displaying persuasive behaviors are justified as it significantly predicts an increased perception of leadership effectiveness. For this management level it is clear that persuasive supplements the impact that strategic has over effectiveness. A similar conclusion can be drawn for the middle and high management levels, particularly when strategic is low. For this condition, persuasive will substitute for the effects of strategic, justifying the training and display of this behavior. This is particularly true as persuasive clearly offset the effect of strategic on effectiveness, when strategic is low. The practical importance of the persuasive behavior is less clear for the high strategic condition, as the effect of strategic over effectiveness is practically the same regardless of the level of the persuasive variable. In conclusion, practical ramifications include the need to attend to persuasive in predicting strategic relations with overall effectiveness. For the three management levels, the bottom line is that in addition to strategic behaviors, the display of

persuasive behaviors increases the individual's potential to be perceived as a more effective leader.

Two specific strengths and limitations should be acknowledged in regards to this study. The first strength relies on the large and reliable data sets where the hypothesis was tested. While the sample sizes for each management level are large enough to detect small interaction effects, data comes from reliable measures of leader behaviors and effectiveness. The second strength is that the analyzed data comes from observers (each data entry represents the average of 7 to 12 LEA Observer Questionnaires filled by bosses, peers and direct reports), thus avoiding the bias inherent to self-evaluations. One limitation is that although the effectiveness scale is highly reliable, it constitutes a subjective evaluation of effectiveness. Stronger practical implications could be drawn if using objective measures of effectiveness in the field of human capital management.

A second limitation is that the observed effect sizes are small, particularly considering the large sample sizes. Given that the size of F, depend in part on sample size, the observed significance can be a function of the large sample sizes; more than a function of the existence of a real interaction effect between the behaviors. The

unique proportion of variance accounted for by the strategic X persuasive interaction in this study is .2%, smaller than the 1% average (.3% to 4% range) found in 45 studies exploring leader moderating effects reported by Podsakoff et al.(1993). Taking these studies as a standard and considering the large sample sizes of this study, a larger effect size should have been observed. From this perspective, the observed effect sizes could be qualified as trivial and while significance was obtained, the small size puts into question the practical value of the interaction between persuasive and strategic behaviors. In addition to these two limitations, it is important to note that this study is more representative of the behavior of male population. For this study, 70.7%, 65.2% and 60.1% of the senior, middle and low management samples respectively were males.

Even though this research suggests that leader behaviors interact and are mutually facilitative on their effects over perceived effectiveness, additional research is needed in at least two directions. First, in regards to the identified limitations of this study, there is the need to explore the strategic-persuasive relationships with additional output variables, particularly with objective measures of effectiveness. Research in this

direction will allow identifying which combinations of strategic-persuasive optimize various effectiveness criteria. Second, based on the assumption that the effects of leader behaviors on effectiveness criterion variables (objective and subjective) are situationally specific, research exploring the observed moderating effects in distinct organizational situations would provide further understanding on the determinants of leadership effectiveness.

APPENDIX A

QUESTIONNAIRE

Leadership Behaviors

Strategic: Taking a long-range, broad approach to problem solving and decision making through objective analysis, thinking ahead and planning.

1. When placed in charge of an important task, he/she will fully understand its implications
2. This person's strength lies in his/her ability to plan
3. When evaluating opportunities, he/she is likely to look for the long-term implications
4. People are likely to be impressed by his/her objectivity in thinking things through

Persuasive: Building commitment by convincing others and winning them over to your point of view.

1. In a leadership role, his/her strength would lie in the fact that he/she won people over to his/her views
2. This individual's success results from his/her capacity to get people to his/her views
3. I think this person is able to sway people's opinions
4. This person is very persuasive

Overall Effectiveness

Overall effectiveness as a leader/manager (i.e., total level of performance against expectations, total impact on role).

1	2 3	4	5 6	7	X
Shows little effectiveness	Not a great strength	Average	A good, solid leader/manager	In a class by him/herself	Don't know

Future potential (i.e., has the ability to go beyond present level versus being topped out, is likely to be a major resource to the organization).

1	2 3	4	5 6	7	X
Has limited potential	Needs to develop in current job	Some possibilities	Strong possibilities beyond present job	Unlimited, a major resource	Don't know

Credibility with management and ability to inspire confidence with superiors (i.e., communicates well, delivers on promises, thinks in similar ways).

1	2 3	4	5 6	7	X
Has little credibility	Not a great strength	Average	Has good credibility	Inspires complete confidence	Don't know

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