
Management Level, Job Function, And Leadership Style A Large Sample Study

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Differences in the leadership styles and practices of (N=24, 454) individuals representing seven management levels and nine job functions within organizations were evaluated using the Leadership Effectiveness Analysis™ Questionnaire. The sample included individuals from more than 2,000 organizations and 24 business sectors across North America. Clear and interpretable differences in leadership styles were obtained between groups based both on organizational level and function. Results are discussed in relationship to both leadership model development and career counseling.

For social, political, and practical economic reasons, psychologists have been interested in the nature of leadership for decades. Myriad theories of leadership behavior exist, often in a fragmented and contradictory state (see Bass, 1990; Chermers, 1997; Culp and Cox, 1997; Du Brin, 1995; Hunt, 1991; Klenke, 1994; Rosenbach & Taylor, 1993; Yukl, 1989; for reviews of this extensive literature).

An important aspect of leadership development is an understanding of what leadership behaviors constitute, and are appropriate for, a given organizational role. For example, what leadership behaviors differentiate a senior executive vs. a first line supervisor? Do these differences vary with the nature of the organizational task (e.g., HR vs. Finance)? Answers to such questions have important implications for both individual and organizational development. In order to develop leadership effectiveness, we must understand what behaviors and approaches are required at different organizational levels and within different functional areas. An understanding of these differences is critical to both individual career development and to organizations attempting to develop their talent pool for future succession planning.

Over the past several years, a significant body of anecdotal and empirical literature on such differences has developed (see for example Center for Creative Leadership, 1998). Much of this literature has suffered from methodological limitations, including the use of small samples, narrow definitions of leadership, the use of subjects who are not in current leadership roles (e.g., laboratory and analog studies), and the use of instruments with limited or unknown construct validity. In addition, many empirical studies focus on academic rather than business organizations.

The current investigation was designed to evaluate differences in leadership style and behavior as a function of management level and job function, while overcoming a number of these limitations. Specifically, a very large and diverse sample of individuals in business and government settings, representing a wide range of organizational positions and functions, were compared. In addition, individuals were assessed on a wide range of leadership behaviors, using an instrument with demonstrated reliability and construct validity.

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Method

Sample

Participants consisted of (N=24,454) job incumbents completing evaluations as part of leadership development programs in 2,158 North American companies. Subjects were selected from all 50 US states, 6 Canadian provinces, and 24 business sectors. Sixty-eight percent of participants were male, and 82% were from the United States. The mean age of the subjects was 41.1 years (SD=8.4) and the mean number of years of management experience was 11.0 (SD=7.5). Sample sizes by management level, job function, organizational size, and business type are provided in Tables 1 through 4 respectively.

Instrument and Procedure

Each participant completed the *Leadership Effectiveness Analysis*TM (LEA; Management Research Group, 1992), a 252 item self-report questionnaire, as part of ongoing organizational development programs. The LEA is a descriptive, behaviorally oriented instrument, providing scores on 22 dimensions of leadership behavior. The instrument has demonstrated high reliabilities, low inter-scale correlations, and excellent construct and criterion-rated validity in extensive large sample studies (Kabacoff, 1998). Brief descriptions of the 22 leadership dimensions assessed by the LEA are provided in *Appendix A*.

Results

Given seven management levels, nine job functions and 22 leadership dimensions, there are 1,254 possible pairwise comparisons between groups. Since this number of comparisons would be difficult to present and synthesize using univariate approaches (e.g. ANOVA), descriptive discriminant analysis (Huberty, 1994) was employed as an exploratory multivariate summarization technique.

In this approach, linear combinations of predictor variables are created that maximize the discrimination among groups. One interprets these linear combinations (canonical variates) by examining their correlations with the original predictor variables. The means of the groups on the new canonical variates can be plotted to provide a summary of group differences. Separate descriptive discriminant analyses based on management level and job function are provided below.

Management Level

In order to evaluate possible differential leadership characteristics by management level, the 22 LEA raw scores were employed as predictor variables and the management level classification was employed as the predicted variable in a descriptive discriminant analysis. Sample sizes for each management level are given in Table 1.

The first and second canonical variates accounted for 75% and 15% of the variance between groups respectively. Both percentages were significantly different from zero at the 0.0001 level. Correlations of the original 22 LEA variables with the two canonical variates are provided in Table 5.

An examination of these correlations suggests that individuals scoring higher on the first canonical variate (CAN1) tended to score higher on Management Focus, Persuasive, Delegation, Production, and score lower on Cooperation, Structuring, and Technical. Similarly, higher scores on the second canonical variate (CAN2) were associated with higher scores on Strategic and Self,

and lower scores on Authority. Group means on the first two canonical variates are presented in Table 6 and plotted in Figure 1.

As can be seen from Figure 1, very clear and interpretable group differences were obtained. As one moves from lower to higher organizational levels, one tends to demonstrate greater Management Focus, Persuasive, Delegation, and Production scores. At the same time, one tends to demonstrate less Cooperation, Structuring and Technical scores. As one moves from higher to lower levels, the reverse occurs.

The Supervisor/Foreman group tends to have higher Authority scores and lower Strategic and Self scores than other groups (CAN2). Conversely, the Professional/Technical group tends to have higher scores on Strategic and Self, and lower scores on Authority when compared with other groups. Other groups fall between these two poles, again lined up by organizational level.

Job Function

In order to evaluate possible differential leadership characteristics by job function, the 22 LEA raw scores were employed as predictor variables and the job function classification was employed as the predicted variable in a descriptive discriminant analysis. Sample sizes for job functions are given in Table 2.

The first and second canonical variates accounted for 55% and 18% of the variance between groups respectively. Both percentages were significantly different from zero at the 0.0001 level. Correlations of the original 22 LEA variables with the two canonical variates are provided in Table 7.

An examination of these correlations suggests that individuals that scored higher on the first canonical variate (CAN1) tended to score higher on Persuasive and Excitement and score lower on Structuring. Similarly, higher scores on the second canonical variate (CAN2) were associated with higher scores on Dominant and Structuring, and lower scores on Empathy and Outgoing. Group means on the first two canonical variates are presented in Table 8 and plotted in Figure 2.

Examination of Figure 2 suggests that job functions fall roughly into four clusters based on LEA scores. Both Marketing/Sales and HR/Personnel form separate and distinct clusters. Administration/Operations, Customer Service, Manufacturing, and Distribution/Fulfillment form a cluster. Accounting/Finance, Data Processing/Systems, and Technical/Engineering/Research also form a cluster.

As can be seen from the figure, clear and interpretable group differences were obtained. For example, the Marketing/Sales group tended to be much higher on Persuasive and Excitement and lower on Structuring than groups describing other job functions. The HR/Personnel group tended to be much higher on Empathy and Outgoing and lower on Dominant than other functional groups. The Accounting/Finance – Data Processing/Systems – Technical/Engineering/Research cluster tended to be higher on Structuring and lower on Persuasive and Excitement than other groups. The Customer Service group tended to have higher Empathy and Outgoing scores and lower Dominant and Structuring scores than all other groups except HR/Personnel.

Discussion

Extensive and theoretically relevant differences in the leadership practices and styles of individuals operating within different organizational levels and fulfilling different organizational functions were obtained in the current investigation. Specifically, managers in higher levels of organizations described themselves as more oriented toward seeking to exert influence and take

charge, building commitment to ideas by winning over others, enlisting the talents of others to meet objectives, and holding high expectations of performance for themselves and others. These findings were more pronounced as one moves up the organizational ladder. Conversely, at higher organizational levels, managers described themselves as less oriented toward accommodating the needs and interests of others, adopting a systematic, methodical approach using guidelines and procedures, and being seen as technical expert in their field.

Supervisors and Foremen tended to describe themselves as having a higher deference to authority and being less likely to make decisions independently than other groups. Of all groups, the Professional/Technical group was most oriented toward taking a strategic, long-range, broad objective approach to problem solving, and looking to themselves as the prime vehicle for decision making.

With regard to job functions and leadership, the Marketing/Sales group described themselves as most oriented toward building commitment to ideas by winning others over to their point of view and keeping others enthusiastic and involved by operating with energy, intensity and emotional expression. This group was the lowest with regard to the use of systematic approaches involving guidelines and procedures.

The Human Resources/Personnel managers tended to describe themselves as higher on concern for others, the need for close supportive relationships, and a desire to act in an extroverted, friendly and informal manner. They were the least likely group to describe themselves as pushing vigorously to achieve results through forceful, assertive and competitive means.

The differences described above are critically important for understanding the role requirements for individuals seeking to develop effectiveness in new organizational roles and positions. This includes both career planning and assessing the fit of personal characteristics with particular roles. The differences are equally important for organizations seeking to develop leadership training programs. In order to fill leadership positions, assess bench-strength and create effective succession planning, organizations require knowledge of the particular demands of a leadership level or role.

A final example may help to clarify some of these points. In our own practice, we have found that in the insurance industry, actuaries often expect to have a significant leadership impact due to their high technical expertise. Often, however, they are frustrated to find that their ideas are neither heard nor implemented because they tend to have low persuasive skills. On the other hand, sales managers in the insurance industry often have a significant impact on organizational direction due to very high persuasive abilities, even though their strategic planning scores tend to be much lower than those of the actuary group. The developmental and organizational implications should be obvious.

Limitations of the current investigation include reliance on self-report measures and the lack of external measures of leadership effectiveness. Large sample follow-up studies incorporating 360-degree observational data and detailed ratings of leadership effectiveness are currently underway.

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Table 1.
Management Level Sample Sizes

Group	Frequency	Percent
President/CEO	788	3.2
Senior or Executive VP	1619	6.6
Division Head/Vice Pres.	3514	14.4
Department/Unit Manager	11623	47.5
Supervisor/Foreman	2538	10.4
Professional/Technical	3810	15.6
Administrative/Clerical	562	2.3

Table 2.
Job Function Sample Sizes

Function	Frequency	Percent
Accounting/Finance	2624	10.7
Administration/Operations	6262	25.6
Customer Service	1787	7.3
Data Processing/Systems	1510	6.2
Distribution/Fulfillment	545	2.2
HR/Personnel	2305	9.4
Manufacturing	1159	4.7
Marketing/Sales	4781	19.6
Technical/Engineer/Research	3481	14.2

Table 3.
Number of Employees in Organization

Employees	Percent
1 to 49	11.8
50 to 99	5.8
100 to 499	16.9
500 to 999	7.7
1000 to 4999	23.4
5000 or more	26.5
Missing	7.9

Table 4.
Type of Business

Business	Percent
Accounting/Banking/Finance	8.4
Business/Info Systems	3.1
Communications/Telecom	8.5
Computer/Office Equip	4.7
Contracting/Construct	1.6
Education	1.5
Entertainment/Recreation/Sports	0.4
Farming/Fishing/Forestry	0.3
Food Products/Processing	2.9
General Manufacturing	7.8
Government	6.9
Health Care/Medical	6.8
Hospitality/Travel/Tourism	1.4
Insurance	8.3
Law/Legal Services	0.2
Mining/Oil/Gas/Chemicals	2.7
Pharmaceutical/Medical Products	5.7
Printing/Publishing/Ad	0.7
Real Estate/Land Development	0.4
Research/Scientific Services	1.2
Social Services	0.4
Transportation	1.3
Wholesale/Retail Trade	5.9
Utilities	4.6
Other	8.7
Missing	5.5

Table 5.
Pooled Within Groups Canonical Structure for Management Level

Scale	Can1	Can2
Conservative	-0.20	-0.11
Innovative	0.24	0.21
Technical	-0.40	0.13
Self	-0.10	0.34
Strategic	0.24	0.41
Persuasive	0.52	0.19
Outgoing	-0.29	0.18
Excitement	0.25	0.05
Restraint	-0.16	-0.03
Structuring	-0.41	-0.29
Tactical	-0.10	0.03
Communication	-0.03	0.00
Delegation	0.46	-0.21
Control	0.03	-0.09
Feedback	0.15	-0.15
Management Focus	0.51	0.05
Dominant	0.22	-0.00
Production	0.33	-0.08
Cooperation	-0.45	-0.15
Consensual	0.01	-0.08
Authority	-0.33	-0.72
Empathy	-0.24	-0.17

Table 6.
Group Means for Management Level

Group	Can 1	Can 2
President/CEO	0.80	0.17
Senior or Executive VP	0.71	0.18
Division Head/Vice Pres.	0.46	0.03
Department/Unit Manager	0.05	-0.09
Supervisor/Foreman	-0.49	-0.29
Professional/Technical	-0.56	0.36
Administrative/Clerical	-1.08	-0.16

Figure 1.
Management Level Group Means on LEA Canonical Variates

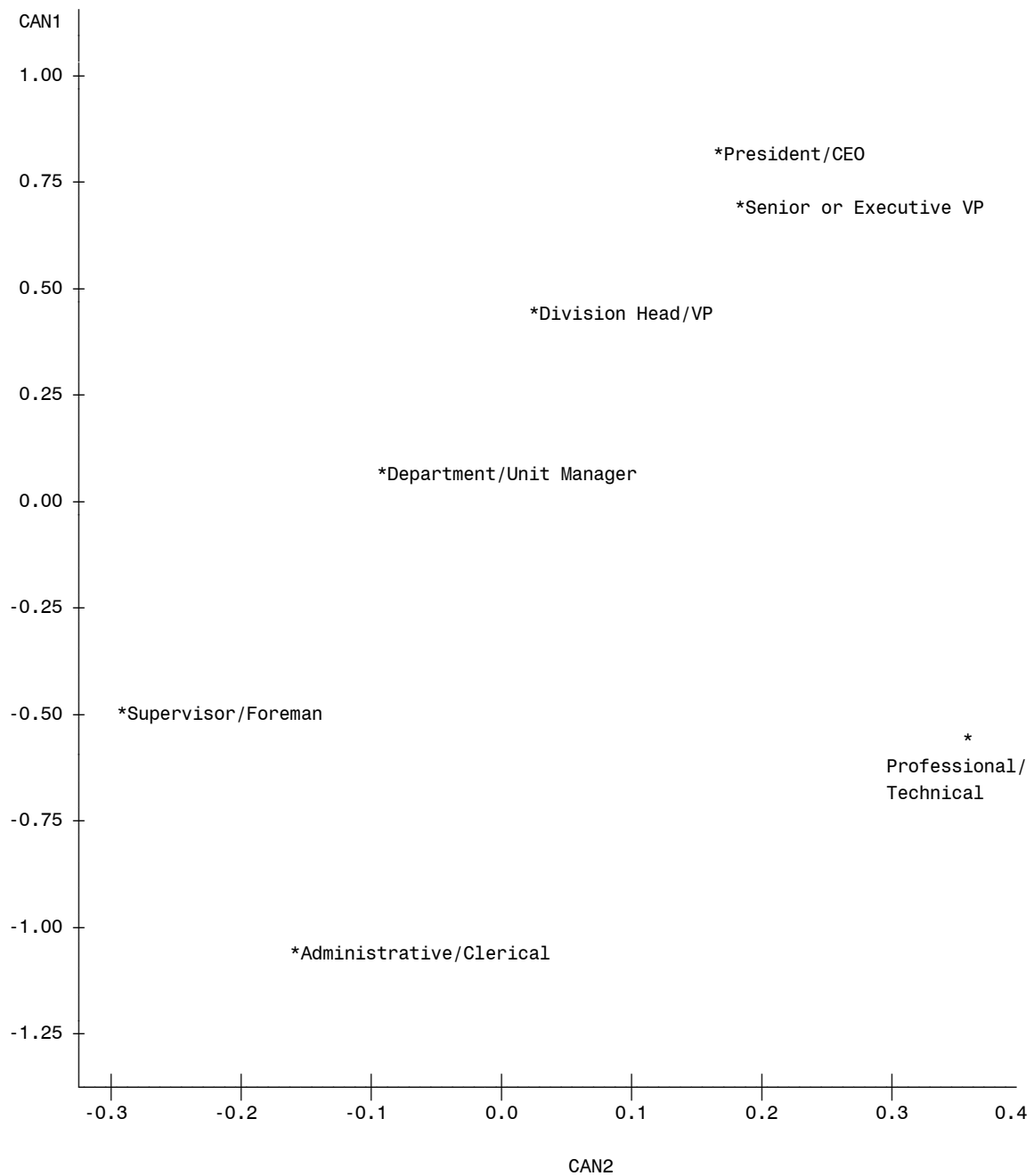


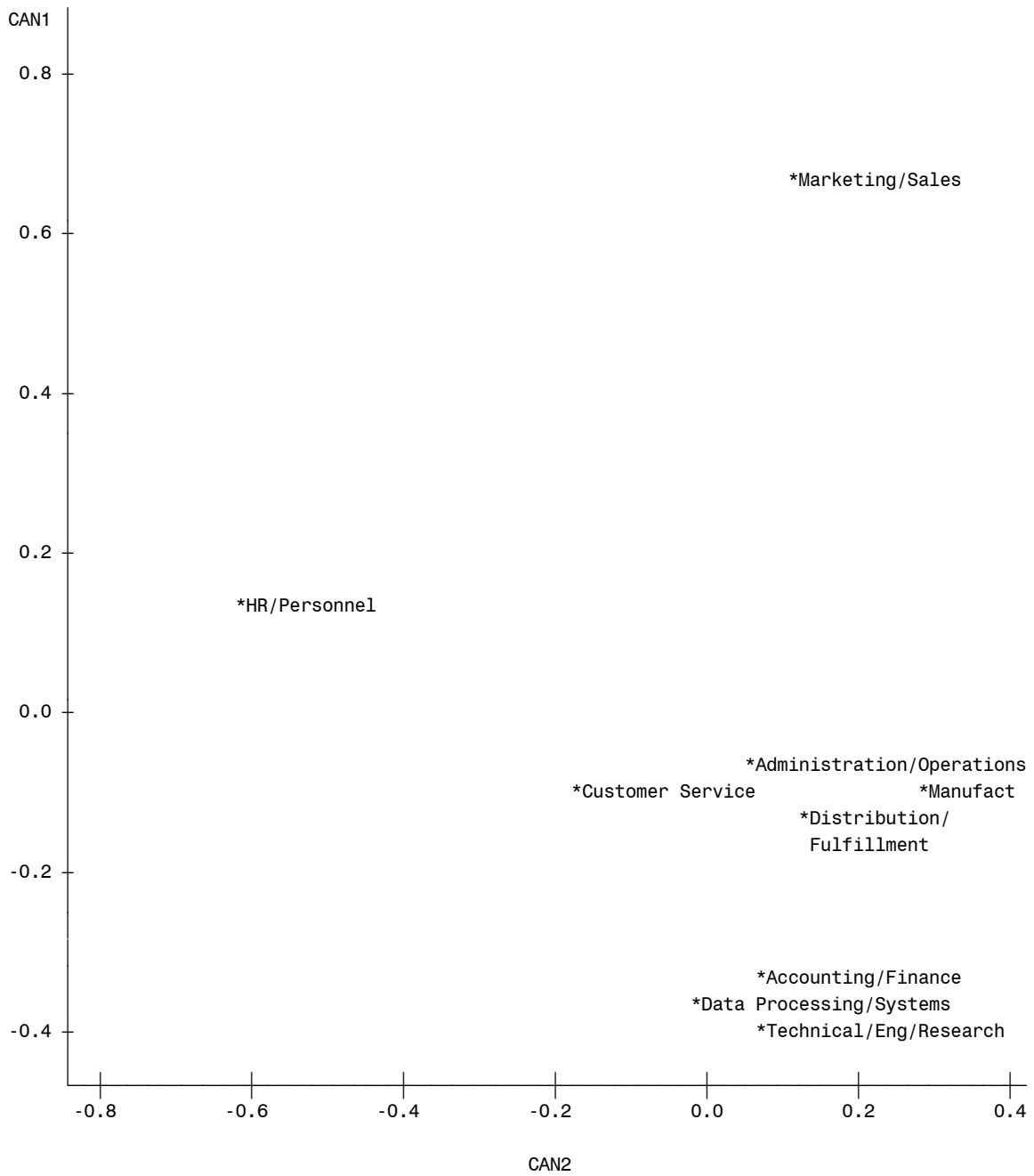
Table 7.
Pooled Within Groups Canonical Structure for Job Function

Scale	Can1	Can2
Conservative	-0.20	0.30
Innovative	0.05	-0.10
Technical	-0.33	-0.14
Self	-0.06	-0.18
Strategic	-0.36	-0.13
Persuasive	0.83	-0.01
Outgoing	0.24	-0.45
Excitement	0.54	-0.11
Restraint	-0.32	0.07
Structuring	-0.47	0.42
Tactical	-0.04	0.14
Communication	0.04	0.06
Delegation	0.00	-0.10
Control	0.05	0.23
Feedback	0.22	0.17
Management Focus	0.28	-0.02
Dominant	0.32	0.43
Production	0.25	0.18
Cooperation	-0.30	-0.17
Consensual	-0.09	-0.17
Authority	-0.14	0.16
Empathy	-0.01	-0.69

Table 8.
Group Means for Job Function

Function	Can 1	Can 2
Accounting/Finance	-0.33	0.08
Administration/Operations	-0.06	0.06
Customer Service	-0.09	-0.18
Data Processing/Systems	-0.36	-0.02
Distribution/Fulfillment	-0.15	0.13
HR/Personnel	0.12	-0.68
Manufacturing	-0.09	0.28
Marketing/Sales	0.68	0.11
Technical/Engineer/Research	-0.40	0.07

Figure 2
Business Function Group Means on LEA Canonical Variates



Appendix A.

Variables Measured by the Leadership Effectiveness Analysis

Creating A Vision

Conservative: Studying problems in light of past practices to ensure predictability, reinforce the status quo and minimize risk.

Innovative: Feeling comfortable in fast changing environments; being willing to take risks and to consider new and untested approaches.

Technical: Acquiring and maintaining in-depth knowledge in your field or area of focus; using your expertise and specialized knowledge to study issues and draw conclusions.

Self : Emphasizing the importance of making decisions independently; looking to yourself as the prime vehicle for decision-making.

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

Developing Followership

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

Outgoing: Acting in an extroverted, friendly and informal manner; showing a capacity to quickly establish free and easy interpersonal relationships.

Excitement: Operating with a good deal of energy, intensity, and emotional expression; having a capacity for keeping others enthusiastic and involved.

Restraint: Maintaining a low-key, understated and quiet interpersonal demeanor by working to control your emotional expression.

Implementing The Vision

Structuring: Adopting a systematic and organized approach; preferring to work in a precise, methodical manner; developing and utilizing guidelines and procedures.

Tactical: Emphasizing the production of immediate results by focusing on short-range, hands-on, practical strategies.

Communication: Stating clearly what you want and expect from others; clearly expressing your thoughts and ideas; maintaining a precise and constant flow of information.

Delegation: Enlisting the talents of others to help meet objectives by giving them important activities and sufficient autonomy to exercise their own judgment.

Following Through

Control: Adopting an approach in which you take nothing for granted, set deadlines for certain actions and are persistent in monitoring the progress of activities to ensure that they are completed on schedule.

Feedback: Letting others know in a straightforward manner what you think of them, how well they have performed and if they have met your needs and expectations.

Achieving Results

Management Focus: Seeking to exert influence by being in positions of authority, taking charge, and leading and directing the efforts of others.

Dominant: Pushing vigorously to achieve results through an approach which is forceful, assertive and competitive.

Production: Adopting a strong orientation toward achievement; holding high expecta-

tions for yourself and others; pushing yourself and others to achieve at high levels.

Team Playing

Cooperation: Accommodating the needs and interests of others by being willing to defer performance on your own objectives in order to assist colleagues with theirs.

Consensual: Valuing the ideas and opinions of others and collecting their input as part of your decision-making process.

Authority: Showing loyalty to the organization; respecting the opinions of people in authority, and using them as resources for information, direction and decisions.

Empathy: Demonstrating an active concern for people and their needs by forming close and supportive relationships with others.

