

Leader Behavior and Organizational Effectiveness: The Moderating Effect of Organizational Climate

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Since the turn of the century, the area of leadership has been the object of analysis and study. Despite the fact that today literature is replete with theories and definitions (Bass, 1981), there is still a great deal to be known about this subject. According to Stogdill (1974, p. 72), "reviews ... have been cited as evidence in support of the view that leadership is entirely situational in origin and that no personal characteristics are predictive of leadership. This view seems to overemphasize the situational and underemphasize the personal nature of leadership." This assertion was based on the fact that the same traits were not particularly useful in distinguishing leaders from non-leaders. Recent reviews (e.g., Yukl, 1981) also strengthen the contention made by Stogdill. For example, Miner's (1978) six motives to manage have documented greater predictive power for managers in larger and more bureaucratic organizations than for managers in smaller and less hierarchical organizations. Similarly, McClelland's work with three needs--achievement, power and affiliation (popularly known as *n* Ach, *n* Pow, and *n* Aff, respectively)--may also be considered a case in point. Andrews (1967) measured the *n* Ach and *n* Pow of the Mexican managers representing two different types of firms: bureaucratic and innovative. His conclusion was clear and unambiguous: *n* Pow predicts managerial success positively in bureaucratic firms but negatively in

innovative firms, whereas with *n* Ach the reverse holds true. Such interaction was also evident in a series of laboratory studies conducted by Litwin and Stringer (1968).

It was probably this line of thinking that led researchers to identify and specify moderator variables. Most leadership theories, nowadays, include one or more moderator(s). For example, the contingency model (Fiedler, 1967) includes such moderators as leader-member relations (most important), position power, and task structure; the path-goal theory House, 1971; House & Dessler, 1974) includes as moderators the personal characteristics of the subordinates and environmental processes and task demands; and the life cycle model (Hersey & Blanchard, 1977) includes subordinates' maturity as a moderator. These were but a few examples: One could find the role of moderator(s) in other leadership paradigms as well (e.g., Vroom & Yetton, 1973; Yukl, 1981).

One such situational approach to leadership, especially suited within Indian culture, has recently been proposed by J.B.P. Sinha (1980). The model of nurturant-task leadership (*NT*) assumes a reciprocal influence relationship between a leader and his or her subordinates. According to Sinha (1980), four typical characteristics of the Indian subordinates led him to the formulation of *NT*. The first has been identified as the preference for personalized over contractual relationship with the leader. This relationship is commonly manifested by "visiting the home of the superior, doing personal chores for his family, sending him delicacies cooked in one's home, etc." (Dayal, 1976, p. 10). While Sinha treats this personalized relationship as one of the dominant socio-cultural values, Ansari (1987) has identified it as one of the powerful influence strategies in Indian organizations. The second typical characteristic of the Indian subordinates has been identified as the tendency to depend excessively on their superiors for directions, guidance, and support. The evidence indicating the presence of excessive dependence in Indians have been independently provided by many authors (e.g., Chattopadhyay, 1975; Kakar, 1978; Pareek, 1968; Sinha, 1970). It has been experimentally demonstrated that if a high dependent person is put under a task-oriented superior, he or she performs better than a low dependent person (Sinha,

1970). The third dominant characteristic of the Indian subordinates is that they readily accept the authority of their superior and yield to his or her demands (Kakar, 1971; Sinha, 1980). The fourth characteristic is that work is not valued in itself. Yet, the subordinates seem to be willing to put extra efforts to maintain a personalized relationship with their superior. In the context of prevailing conditions of declining Indian values, Rastogi (1986) points out that two acute distortions have deformed the mutuality and complementarity of individual and national interests. One is the parochial perception of self-identity by the people and the other is the non-inculcation of the norms of work excellence, duty and non-egoistic cooperation among the people at large. According to him, these distortions have thrown up a type of person who "is selfish and narrow in outlook, indifferent towards his duty and wider responsibility, and incompetent and unwilling to improve" (p. 156). This is the reason why Indians show strong hankering for *Aram* (rest or relaxation without being tired, Sinha, 1980).

In view of the above social realities, according to Sinha, an *NT* leader will be effective. The *NT* leader "cares for his subordinates, shows affection, takes personal interest in their well-being, and above all, is committed to their growth" (Sinha, 1980, p. 55). In order to be effective, however, an *NT* leader makes his or her nurturance contingent on the subordinate's task accomplishment. He or she helps his or her subordinates grow up, mature, and assume greater responsibility. Once the subordinates reach a reasonable level of maturity, they generate pressure on the leader to shift to the participative (*P*) style. From this perspective, then, the *NT* style is considered to be a fore-runner of *P* style in the reciprocal influence process between a leader and his or her subordinates.

The *NT* model receives meaningful support from later findings too. Till date, the usefulness of the model has been investigated in over 40 experimental and field studies (see for an extended discussion, such reviews as those of Ansari, 1986; Sinha, 1983; Sinha, Pandey, Pandey, & Sinha 1986). In these investigations, (i) the *NT* style has been shown to be distinct from other leadership styles, (ii) it has

been found to have a positive impact on several indicators of effectiveness--commitment, facets of job satisfaction, and perceived effectiveness; and (iii) it has been found to be effective for those subordinates who want to maintain personalized and dependent relationships and willingly accept the authority of the superior. Evidence (Ansari, 1987; Ansari & Shukla, 1987) also exist that *NT* leaders receive more favorable ratings on the evaluation of the leader and attributions of leadership compared to other types of leaders.

The prime objective of this research was to investigate the moderating effect of organizational climate on the relationship between leader behavior and organizational effectiveness. The rationale for the use of organizational climate as a moderator is based on the assumption that it has been found to be related to several variables such as job satisfaction, leader behaviors, and the quality of work group interactions (for details, see Schnake, 1983). Of particular note about the Indian sector is that climate affects most significantly whether or not a manager attempts to apply what he or she has learned upon returning to his or her job following a management development experience (Baumgartel, 1981.) As has been mentioned at the outset of this paper, most of the current leadership paradigms include at least one moderator. However, most of the research on moderators has been unsystematic (Miner, 1980) because "they fail to focus on the *mechanisms* by which moderators operate" (Howell, Dorfman, & Kerr, 1986, p. 88, italics in original). In view of this complexity, managers report greater difficulties in attempting to apply contingency models of leadership. Recently, Howell et al. (1986) have proposed leadership neutralizers/enhancers as moderators. According to them, both enhancers and neutralizers are the two varieties of the same basic type of moderator. "Enhancers represent a positive moderating influence... while neutralizers represent a negative moderating influence" (p. 90). In the present study organizational climate is expected to act as enhancers when it would make the predictor-criterion (leader behavior-organizational effectiveness) relationship stronger in a highly favorable climate, whereas it is expected to act as

neutralizers when it would weaken the predictor-criterion relationship in a less favorable climate. In summary, then, the general hypothesis investigated here is that *a significant relationship would be found between leader behavior and organizational effectiveness for the organization having a highly favorable climate and that no such relation would be found for the organization having a less favorable climate.*

METHOD

Research Site and Sample

The survey was conducted in organizations located in northern India. Data summary of the seven organizations under study is given in Table 1. As can be seen from Table 1, organizations were as heterogeneous as the author could find them. That is, some represented public sectors while others were privately managed; some were manufacturing concerns, others service organizations; some turned out to be large ones, others small ones; some were running in profit, others in loss; and some were known to be efficient, others inefficient. Having such a heterogeneous group of organizations was a deliberate attempt by the author in order to generalize the survey findings in significantly different settings.

Altogether 440 executives representing the above described organizations voluntarily participated in the study. They were predominantly males (90%). Of the sampled executives, majority of them represented low and middle levels of management (42% each), whereas only about 14% constituted the top level. A major bulk of them (69.4%) was in the age range of 26 to 45 years ($M = 37.89$). Over 50%, of the executives were graduates (i.e., bachelor's degrees), some (18%) had master's degrees, and only a few ones were holding professional degrees (e.g., PhD). On the whole, 67% of the respondents had been working in their present positions for the last 4 years or less ($M = 4.11$) and had been working for the present organizations for the last 5 to 19 years ($M = 10.65$). About 66% of the respondents were promoted at least once or twice during their professional career ($M = 1.87$),

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Table 1: Data Summary about Organizations

| <i>Organization No.</i> | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
|-------------------------|----------|----------|----------|----------|----------|----------|----------|
| Ownership: | PB | PR | PR | PB | PB | PB | PR |
| Nature : | SM | S | S | M | M | M | M |
| Established in: | 1940's | 1910's | 1950's | 1970's | 1950's | 1970's | 1930's |
| Profit/Loss: | L | P | P | P | P | L | P |
| Efficiency: | I | E | E | E | E | E | E |
| Size approximately): | 4,150 | 470 | 270 | 3,225 | 10,820 | 3,530 | 4,000 |
| Executives: | 150 | 50 | 33 | 645 | 1,203 | 262 | 80 |
| Non-executives: | 4,000 | 420 | 237 | 2,580 | 9,617 | 3,268 | 3,920 |

Note. PB = Public; PR = Private; S = Service; SM = Semi-manufacturing; M = Manufacturing; P = Profit; L = Loss; E = Efficient; I = Inefficient.

and they were supervising 1 to 9 subordinates ($M = 2.76$). Finally, about 55% of the executives were in a salary range of Rs 1,501 to 2,700 per month, whereas about 24% were in the range of Rs 2,701 to 3,600.

Measures

Some of the measures employed in the study were subjected to a varimax rotated factor analysis--that is, a partial test of the construct validity (Nie, Hull, Jenkins, Steinbrenner, & Hunt, 1975). Two commonly used methods of factoring are: (i) principal factoring without iteration; and (ii) principal factoring, with iteration. In this study, the latter method was adopted because, according to Nie *et al.* (1975), it has two advantages over the former: (a) It automatically replaces the main diagonal elements of the correlation matrix with communality estimates. In this the user gets the so-called inferred factors; (b) It employs an iteration procedure for improving the estimates of communality. Varimax rotation was used as in this method the emphasis is on cleaning up the factors *rather than* variables. For each factor, varimax rotation tends to yield high loadings for a few variables. The rest of the loadings in the factors are expected to approximate zero. In this way, one is able to infer factors in a neat and clean way.

The selection of items to be retained in the scale (after factor analysis) was made on the basis of three criteria. First, the solution was constrained using the criterion of eigenvalue > 1.00 , and meeting the criteria of factor loading $\geq .35$ on the defining component and no cross-loadings $> .25$. Secondly, in cases where an item was loaded heavily ($> .35$) with two factors, it was retained at both places. Thirdly, items were selected on an examination of each item's correlation with other items representing the factor and their correlations with items in the remaining factors. Only those items were included in the final analysis which had high intercorrelation within a factor and low intercorrelation with the remaining factors. A brief description of the measures is given below:

Predictors

Based on the recent works by Ansari (1986), Hassan (1986), Sinha (1980), and Verma (1986), 50 single-statement items were used to tap the leadership styles of the immediate superiors. Five style dimensions were incorporated: autocratic, participative, nurturant, task-oriented, and bureaucratic; each dimension consisting of a set of 10 items. Respondents were asked to rate each item on a 5-point scale (1= *quite false*; 5= *quite true*) for whether it was true or false for their immediate superior.

The set of items with their appropriate scores were then submitted to a factor analysis. Factor loadings obtained are reported in Table 2. It is evident that the measures constrained to four meaningful and interpretable factors (with a total of 26 significant items), accounting for a total of 84.2% of the variance. It can also be seen from Table 2 that, for the most part, the items loaded rather cleanly. The overall strategy was that the items bearing significant loadings on more than one factor were credited to the factor on which the loading was the highest except for a few where the items were allowed to stay on two factors (Factors 1 and 2). Apparently, as indicated by the percentage of variance explained, the first two factors (nurturant-task and participative) were the strongest ones whereas the remaining two factors (bureaucratic and autocratic) were the weak ones.

It should also be noted (see Table 5) that the average correlation between the factors used as scales was .26 indicating a reasonable level of scale independence. However, some overlap in the factors was obvious partly because of some spread-over effects from one factor to another and partly because of the fact that measures were perceptual ones. The overlap is clear as to the first two scales: nurturant task and participative. The possible reason may be that the two scales had at least five common items. While the two were highly interrelated, their impacts on criterion measures were not identical--a fact shown in the next section. Participative behavior, as one would expect, was inversely related to autocratic behavior. The nurturant-task behavior was closely related positively with bureaucratic behavior but negatively with autocratic behavior. While participative

Table 2: Rotated Factors and Factor Loadings Obtained--Leader Behavior Measures

| Items | Factor | | | |
|---|--------|------|------|------|
| | 1 | 2 | 3 | 4 |
| He/she helps his/her subordinates to grow up and assume greater responsibility. | .49 | .35 | .10 | -.06 |
| He/she makes his/her subordinates feel free even to disagree with him/her. | .23 | .61 | .06 | -.13 |
| He/she provides all information to his/her subordinates and let them jointly find the solution of a problem. | .19 | .61 | .14 | -.10 |
| He/she interacts with his/her subordinates as if they are equal. | .18 | .63 | .03 | -.07 |
| He/she goes by the joint decision of his/her group. | .24 | .57 | .12 | -.17 |
| He/she takes special care that work gets top priority. | .67 | .19 | .21 | .02 |
| He/she believes that most of the interpersonal troubles start because people try to be over friendly and informal on the job. | .06 | -.02 | .06 | .42 |
| He/she maintains high standard of performance. | .71 | .18 | .24 | .00 |
| He/she thinks that clear job descriptions are necessary for the effective functioning of the employees. | .42 | .21 | .24 | .02 |
| He/she does not think that his/her subordinates deserve to be officers. | -.22 | -.23 | -.01 | .39 |
| He/she openly shows affection to those subordinates who work hard. | .44 | .36 | .13 | -.02 |
| He/she believes that one can really grow up by learning to do a job well. | .67 | .24 | .05 | -.16 |

TABLE 2-Contd.

| Items | Factor | | | |
|---|--------|------|------|------|
| | 1 | 2 | 3 | 4 |
| He/she always follows standard rules and regulations. | .28 | .13 | .75 | .01 |
| He/she grants full freedom and autonomy to his/her subordinates so that they can work best. | .37 | .55 | .15 | -.18 |
| He/she rules with iron hand in order to get work done. | .06 | -.18 | .17 | .56 |
| He/she wants to have full power and control over his/her subordinates. | -.07 | -.25 | .14 | .54 |
| He/she believes that all of us have more or less equal potentialities. | .16 | .56 | .10 | -.08 |
| He/she drives himself/herself really hard. | .57 | .14 | .10 | .14 |
| As and when necessary, he/she gives specific directions to his/her subordinates. | .54 | .22 | .11 | .05 |
| He/she is a friendly type. | .25 | .56 | .05 | -.20 |
| He/she always goes by the rules and procedures. | .18 | .09 | .78 | .03 |
| He/she maintains strict division of labor even in his/her own group. | .23 | .15 | .49 | .13 |
| He/she finds time to listen to the personal problems of the subordinates. | .39 | .46 | .04 | -.12 |
| He/she does not tolerate any interference from his/her subordinates. | .05 | -.25 | .16 | .37 |
| He/she has affection for his/her subordinates. | .44 | .45 | .11 | -.12 |
| He/she believes that if he/she does not watch out, there are many people who pull him/her down. | -.08 | -.04 | .00 | .41 |
| Eigenvalue | 14.08 | 3.60 | 1.59 | 1.21 |
| Percentage of Variance | 58.7 | 14.6 | 5.8 | 5.1 |

Note. N = 440; Factor 1 = Nurturant-task; Factor 2 = Participative; Factor 3 = Bureaucratic; Factor 4 = Autocratic.

behavior exhibited a positive relationship with bureaucratic behavior; the latter showed a positive relationship with autocratic behavior.

Moderators

A modified version of Litwin and Stringer's (1968) Organizational Climate Questionnaire was used to assess respondents' perceptions of the organizational climate. The climate questionnaire was modified by Schnake (1983) with the intention that removing the affective component from responses to an organizational climate questionnaire would improve the discriminant validity of the instrument, and would lead to a more objective measure of organizational climate.

Subjects were given a set of 30 statements concerning their perceptions and observations about the organization in which they were working. They rated each item on a 5-point *extent* scale (1= *to almost no extent*; 5= *to a very great extent*) for whether it was true for their organizations. The factor analysis results are provided in Table 3. The climate measures constrained to three meaningful factors (with a total of only 13 significant items), accounting for a total of 86.7% of the variance. The three factors were respectively named, reward and participation, structure, and warmth and support. These three factors were identical to the first three factors (out of 5) identified by Schnake (1983). In the present analysis, two other factors--standards and responsibility--did not emerge meaningfully.

Table 5 suggests that the average correlation between the factors used as scales was .29, indicating a reasonable level of scale independence. It was also of interest to examine how scores on these three dimensions reflect known differences in seven company climates. The mean scores and *F* ratios are presented in Table 4. The differences were highly significant on all the climate factors. Even a cursory look at Table 4 reveals that organizations 1 and 6 had the most unfavorable climate. On the other hand, the remaining organizations had the favorable climate. On the whole, these mean scores were consistent with the information

**Table 3: Rotated Factors and Factor Loadings Obtained--
Climate Measures**

| Items | Factor | | |
|---|--------|------|------|
| | 1 | 2 | 3 |
| The assignments to this organization are clearly defined. | .26 | .54 | .09 |
| In this organization, we set very high standards for promotion | .18 | .57 | .08 |
| The policies and goals of this organization are clearly understood. | .24 | .79 | .17 |
| The goals I am supposed to achieve in my area is realistic. | .17 | .65 | .04 |
| People in this organization don't really trust each other very much. (R) | .16 | .15 | .69 |
| In this organization, I am given a chance to participate in setting the performance standards for my job. | .46 | .26 | -.13 |
| In this organization, people don't seem to take much pride in the excellence of their performance. (R) | .08 | .19 | .51 |
| We have a promotion system that helps the best person rise to the top. | .73 | .24 | .07 |
| People in this organization tend to be cool and aloof toward each other. (R) | -.10 | .08 | .57 |
| In this organization, people are rewarded in proportion to the excellence of their job performance. | .79 | .26 | .07 |
| There is a lot of warmth in the relationship between management and other personnel in this organization. | .53 | .16 | .10 |
| In this organization, people are encouraged to initiate projects that they think are important. | .68 | .07 | -.06 |
| I have a clear idea of what I am supposed to do in my job. | .13 | .43 | .10 |
| Eigenvalue | 6.68 | 2.93 | 1.39 |
| Percentage of Variance | 52.6 | 23.1 | 11.0 |

Note. $N = 440$; (R) = Reverse-coded item; Factor 1 = Reward and Participation; Factor 2 = Structure; Factor 3 = Warmth and Support.

Table 4: Mean Scores on Climate Factors and Significance of their Differences

| Climate/Organizations | 1 | 2 | 3 | 4 | 5 | 6 | 7 | F (6,433) |
|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|
| Reward and Participation | 12.18 (6) | 12.43 (5) | 14-11 (2) | 13.56 (3) | 13.01 (4) | 11.61 (7) | 14.46 (1) | 4.04 |
| Structure | 16.45 (6) | 18.48 (2) | 19.18 (1) | 18.35 (3) | 17.77 (4) | 14.71 (7) | 17.17 (5) | 11.82 |
| Warmth and Support | 9.18 (6) | 9.83 (4) | 11.71 (1) | 9.36 (5) | 10.38 (2) | 9.13 (7) | 9.86 (3) | 5.65 |

Note. All F-ratios are significant at .001 level of confidence; Figures in parentheses indicate ranks. The higher the rank the less favorable the climate.

drawn from other sources (i.e., investigators' observations). Thus, in the final analysis, organizations 1 and 6 were classified as having an unfavorable climate and those others were classified as having a favorable climate. Finally, one-way ANOVA was performed on the climate dimensions to check if there existed a significant difference between the two types of organizations. Once again, scores on all the climate dimensions reflected a highly significant difference ($p < .001$) between the classified organizations. In summary, then, organizational environment scores were based on collective judgments of the climates in the particular organization of which the individual was a part. Such analytical strategy has been adopted in a number of previous research (e.g., Ansari, Baumgartel, & Sullivan, 1982; Baumgartel, Sullivan, & Dunn, 1978). Accordingly, organizational climate was conceptualized as "the sum total of the particular attributes of the organization as a system as well as those values and norms which symbolize the on-going pattern of the organization and its sub-units" (Ansari, 1980, p. 94).

Criteria

The dependent measures employed in the present analysis included three scales which are as follows:

Organizational effectiveness. An eight-item scale (Mott, 1972) was used to tap the perceived organizational effectiveness. The scale consisted of such dimensions as quality, quantity, efficiency, adaptability, and flexibility. Each item was rated on a 5-point scale.

Organizational commitment. A nine-item scale (Cook & Wall, 1980) was used to tap the respondents' organizational Commitment. Each item was rated on a 7-point scale ($1 = no, I strongly disagree; 7 = Yes, I strongly agree$). The scale was composed of three dimensions: organizational identity, organizational involvement, and organizational loyalty. A principal components analysis using varimax rotation (Cook & Wall, 1980) revealed that the three dimensions were clustered together

in the rotated factor matrix; hence, they were treated as one single factor, i.e., organizational commitment.

Satisfaction. The satisfaction measure (Schnake, 1983) consisted of 11 items employing a 7-point scale (1 = *very dissatisfied*; 7 = *very satisfied*). Schnake (1983) reported three dimensions on the basis of a factor analysis (using oblique rotation): intrinsic satisfaction, extrinsic satisfaction, and social satisfaction. The present study also ended up with identical factors by employing a varimax rotated factor analysis. Since the factor analysis results in this study (varimax rotation) and that of Schnake's (oblique rotation) were identical, factor loadings obtained are not reported in this paper. As can be seen from Table 5, the three factors were positively intercorrelated. Thus, overall satisfaction score was also used in the present analysis.

Descriptive statistics, coefficients α , and intercorrelations of the study variables are contained in Table 5. It should be noted that all scales employed in the present study exhibited well over .50 coefficients α suggested by Nunnally (1978) as a minimum level for acceptable reliability.

Procedure

Two female Research Assistants conducted the interviews with executives; both of them were master's in psychology and experienced in interviewing. Data were collected during November 1984 and March 1985. Executives were assured complete *anonymity* of their individual responses, and the importance of frank and sincere replies was emphasized. The executives were interviewed individually and in private.

The Statistical Analyses

Researchers have used different analytical strategies to identify moderators in leadership studies. According to Howell et al. (198b), different strategies (e.g., ANOVA, median split sample with correlation coefficients, and hierarchical

Table 5: Descriptive Statistics, Coefficients Alpha, and Intercorrelations of Study Variables

| <i>Variables</i> | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> | <i>8</i> | <i>9</i> | <i>10</i> | <i>11</i> | <i>12</i> | <i>13</i> |
|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|
| Predictors | | | | | | | | | | | | | |
| 1. LB—NT | 89 | | | | | | | | | | | | |
| 2. LB—P | 85 | 89 | | | | | | | | | | | |
| 3. LB—B | 46 | 36 | 77 | | | | | | | | | | |
| 4. LB—F | -23 | -37 | 11 | 69 | | | | | | | | | |
| Moderators | | | | | | | | | | | | | |
| 5. CL—RP | 29 | 21 | 19 | -09 | 80 | | | | | | | | |
| 6. CL—ST | 29 | 18 | 24 | -03 | 47 | 78 | | | | | | | |
| 7. CL—WS | 19 | 18 | 11 | -24 | 11 | 28 | 64 | | | | | | |
| Criteria | | | | | | | | | | | | | |
| 8. OE | 32 | 20 | 23 | -01 | 32 | 48 | 36 | 86 | | | | | |
| 9. OC | 27 | 20 | 17 | -07 | 35 | 36 | 28 | 31 | 61 | | | | |

| | | | | | | | | | | | | | |
|-------------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|
| 10. IS | 43 | 36 | 17 | -23 | 37 | 39 | 26 | .37 | 38 | 81 | | | |
| 11. ES | 15 | 10 | 11 | -08 | 37 | 28 | 1.5 | 10 | 34 | 46 | 72 | | |
| 12. SS | 28 | 24 | 10 | -09 | 15 | 23 | 29 | 36 | 29 | 56 | 30 | 74 | |
| 13. OS | 38 | 31 | 17 | -18 | 40 | 42 | 28 | 35 | 43 | 90 | 74 | 72 | 85 |
| <i>Mean</i> | 40.51 | 38.23 | 10.10 | 18.28 | 12.91 | 17.02 | 9.72 | 26.04 | 44.07 | 24.04 | 13.81 | 16.29 | 54.14 |
| <i>SD</i> | 7.42 | 7.73 | 2.53 | 4.10 | 4.35 | 3.90 | 2.54 | 5.31 | 6.94 | 5.75 | 4.23 | 3.02 | 10.48 |

Note. Decimal points are omitted in correlation matrix; Diagonal entries indicate coefficients alpha; $N = 440$; r_s required to be significant at .05 and .01 levels of confidence are .09 and .12, respectively; LB=Leader Behavior; NT = Nurturant-Task; P = Participative; B = Bureaucratic; F = Autocratic; CL = Climate; RP = Reward and Participation; ST = Structure; WS = Warmth and Support; OE = Organizational Effectiveness; OC = Organizational Commitment; IS = Intrinsic Satisfaction; ES = Extrinsic Satisfaction; SS = Social Satisfaction; OS = Overall Satisfaction.

multiple regression) yield different information and the techniques may have been used inappropriately. For example median split sample approach using zero-order correlations gives information regarding the degree and direction of relationship between the two variables, whereas hierarchical regression approach provides information regarding the form or pattern of a relationship between the two variables. In any event, both Arnold (1982) and Stone and Hollenbeck (1984) have strongly recommended the use of a hierarchical regression approach as the appropriate strategy to identify moderator(s). Since the position taken in the present study is slightly different from the one recommended above, a note is in order. In a hierarchical regression analysis, a moderator is identified through interaction. For each interaction pair scores on predictor and moderator are first converted to z scores and then a product term is formed. If the moderator hypothesis is to be confirmed, the beta weight of the product term (i.e., interaction) should be significant. Significant interactions are then analyzed graphically (Hunt, Osborn, & Larson, 1975). It should also be mentioned that the use of such regression approach generally requires that the data in each pair are obtained on interval scales. In the present analysis, instead of using hierarchical regression, the stepwise multiple regression strategy was adopted to identify the role of organizational climate as a moderator. The reason is that the moderator was split into two groups based on the mean company environment scores. Thus, two sets of stepwise regression analyses were run, one for a highly favorable climate and the other for a less favorable climate.

RESULTS

The data were first analyzed using zero-order correlations for the entire sample. As Table 5 indicates that before the effects of organizational climate were considered, the criterion measures were each positively and significantly related to NT , P , and B , leadership behaviors. Although the magnitude of these correlations was not very high (the highest $r^2 = .18$), it seems to be comparable with correlations reported in other studies (e.g., Ansari, 1986). But F behavior

Table 6: Zero-Order Correlations Between Predictors and Criterion Variables--Sub-group Analysis

| Criteria/Predictors | Favorable Climate ^c | | | | Unfavorable Climate ^d | | | |
|---------------------|--------------------------------|-----------------|-----------------|------------------|----------------------------------|-----------------|-----------------|-----|
| | NT | P | B | F | NT | P | B | F |
| OE | 38 ^b | 23 ^b | 21 ^b | -04 | 18 ^a | 13 | 21 ^b | 10 |
| OC | 28 ^b | 21 ^b | 19 ^b | -05 | 22 ^b | 17 ^a | 10 | -09 |
| IS | 44 ^b | 34 ^b | 15 ^b | -25 | 39 ^b | 39 ^b | 19 ^a | -15 |
| ES | 11 ^a | 03 | 10 | -10 | 21 ^b | 23 ^b | 14 | -04 |
| SS | 31 ^b | 24 ^b | 04 | -14 ^a | 22 ^b | 21 ^b | 16 ^a | 02 |
| OS | 37 ^b | 27 ^b | 13 ^a | -22 ^b | 36 ^b | 36 ^b | 20 ^a | -09 |

Note. Decimal points are omitted; ^a $p < .05$; ^b $p < .01$; ^c $\mathcal{N} = 281$; ^d $\mathcal{N} = 159$; NT = Nurturant-Task; P = Participative; B = Bureaucratic; F = Autocratic; OE = Organizational Effectiveness; OC = Organizational Commitment; IS = Intrinsic Satisfaction; ES = Extrinsic Satisfaction; SS = Social Satisfaction; OS = Overall Satisfaction.

Table 7: Stepwise Multiple Regression Results--Leader Behavior vs. Outcome Variables

| Criteria/Predictors | Favorable Climate | | | | Unfavorable Climate | | | |
|---------------------|-------------------|------------------|----|------------------|---------------------|-----------------|----|-----|
| | NT | P | B | F | NT | P | B | F |
| OE | | | | | | | | |
| R ² | 15 | 17 | 17 | 17 | 05 | 06 | 05 | 06 |
| Beta | 55 ^b | -24 ^a | 06 | -01 | 22 | -10 | 13 | 09 |
| Order | 1 | 2 | 3 | 4 | 2 | 4 | 1 | 3 |
| OC | | | | | | | | |
| R ² | 08 | 09 | 09 | 09 | 05 | 06 | * | 06 |
| Beta | 29 ^b | -06 | 10 | -01 | 40 ^a | -22 | * | -08 |
| Order | 1 | 3 | 2 | 4 | 1 | 2 | * | 3 |
| IS | | | | | | | | |
| R ² | 19 | 22 | * | 21 | 21 | 16 | 17 | 16 |
| Beta | 52 ^b | -16 ^b | * | 19 | 19 | 14 | 02 | -08 |
| Order | 1 | 3 | * | 2 | 2 | 3 | 4 | 3 |
| ES | | | | | | | | |
| R ² | 01 | 02 | 04 | 04 | * | 05 | 06 | 06 |
| Beta | 24 ^a | -27 ^a | 10 | -16 ^a | * | 22 ^a | 05 | 02 |
| Order | 1 | 2 | 4 | 3 | * | 1 | 2 | 3 |

| | | | | | | | | | |
|-----------|-----------------|------------------|-----|------------------|----|----|----|----|-----|
| SS | | | | | | | | | |
| R2 | 10 | 11 | 10 | 11 | 05 | 06 | 06 | 06 | 05 |
| Beta | 38 ^b | -06 | -09 | -05 | 12 | 10 | 10 | 05 | 06 |
| Order | 1 | 4 | 2 | 3 | 1 | 4 | 4 | 3 | 2 |
| OS | | | | | | | | | |
| R2 | 14 | 17 | 17 | 16 | 14 | 13 | 13 | 14 | 14 |
| Beta | 49 ^b | -22 ^a | 02 | -18 ^b | 16 | 20 | 20 | 04 | -02 |
| Order | 1 | 3 | 4 | 2 | 2 | 1 | 1 | 3 | 4 |

Note. Decimal points in R² and Beta are omitted; ^a $p < .05$; ^b $p < .01$; ^c $N = 281$; ^d $N = 159$; *Tolerance level insufficient for further computation; NT = Nurturant-Task; P = Participative; B = Bureaucratic; F = Autocratic; OE = Organizational Effectiveness; OC = Organizational Commitment; IS = Intrinsic Satisfaction; ES = Extrinsic Satisfaction; SS = Social Satisfaction; OS = Overall Satisfaction.

was seen to relate significantly but negatively only with two criterion measures--intrinsic satisfaction and overall satisfaction.

Next, in order to test for the effects that organizational climate might have on the leader behavior-organizational effectiveness relationship, two separate stepwise multiple regression analyses were performed. The zero-order correlations are reported in Table 6 and the summary of regression analyses is presented in Table 7. As can be seen in Table 6, the general trend is similar to the one reported in Table 5. That is, a significant relationship was obtained in both the climates, although the magnitude of correlations was not identical in the two conditions. This fact speaks of the issue regarding the form or pattern of the leader behavior-organizational effectiveness relationship which is quite evident in the data. Even a cursory look at Table 7 would make it clear that leadership behavior had a strong and meaningful impact on each and every measure of organizational effectiveness in a highly favorable climate. In contrast, only two regression coefficients were significant in a less favorable climate (that is, between *NT* and organizational commitment and between *P* and extrinsic satisfaction); however, overall R^2 's were not significant for these effects.

Taken as a whole, Table 7 suggests that the *NT* behavior has a powerful positive influence on a number of indicators of organizational effectiveness. But this finding is evident only in a highly favorable climate. The *P* and the *F* styles do contribute significantly some amount of variance to organizational effectiveness, but the impacts (i.e., beta weights) are all negative. However, *B* behavior is not found to be significantly related to any dependent measures. Thus, the hypothesis that organizational climates would serve as leadership neutralizer/enhancer variables gets substantiated.

DISCUSSION

Several interesting themes follow from the findings. To begin with, organizational climate did appear to represent an important moderator of the leader behavior-organizational effectiveness relationship for this sample of Indian

managers. For example, of the six measures of organizational effectiveness, five were significantly influenced by leader behavior in a highly favorable climate, thus supporting the hypothesis of leadership enhancers. In contrast, no such effect was evident in the case of a less favorable climate, thus supporting the hypothesis of leadership neutralizers. These findings are consistent with the data presented by Sinha (1980) indicating that leadership styles do not affect organizational efficiency directly. Rather, autocratic and nurturant-task styles affect organizational climate and they in turn strongly influence the efficiency of an organization.

The finding that nurturant-task behavior has a significant positive impact on a number of organizational effectiveness measures is consistent with that of previous studies (e.g., Ansari, 1986; Sinha, 1980, 1983; Sinha et al., 1986). The strong overlap between nurturant-task and participative behavior also is in line with the previous studies (Ansari, 1986; Sinha et al., 1986). However, in spite of being an overlap between the two, their impacts on organizational effectiveness are not similar. The fact is that in this study participative behavior did contribute some amount of variance (maximum $R^2 = .02$) but negatively to some measures of organizational effectiveness. This finding makes it clear that the two styles are conceptually distinct. It should also be noted that the people orientation of the participative behavior is of a *fraternal* type, whereas that of nurturant-task behavior is of benevolent *paternal* type.

Treating organizational climate as a moderator has important implications for organizations. As Howell et al. (1986) have suggested, a manager must know which types of moderators are present in order to develop an effective strategy for influencing subordinates. The present data suggest that essentially the same leader behavior which enhances the efficiency of an organization in one climate also neutralizes it in another. Hence, there is a clear *interaction* between leader behavior and organizational climate. This follows that the more an organization has the favorable climate (that is, in terms of reward and participation, structure, and warmth and support), the more

likely its managers are to be nurturant-task-oriented in order to be effective. If organizational climate has such an important impact on the relationship between leader behavior and organizational effectiveness, then Indian organizations be changed in such a way as to provide a favorable environment for leadership effectiveness. Baumgartel (1981) has suggested two change strategies: One "is by deliberate policy choices of the chief executive officer or top management" and the other main option is an "organizational development program--a planned program for changing the character of an organization involving the use of behavioral science consultants and social scientific technologies of planned change" (p. 8).

In summary, then, organizational climate does appear to represent an important variable in the leader behavior-organizational effectiveness relationship, assuming that the nature of company environment is sufficiently favorable to cue the nurturant-task leader behavior. It should be pointed out, however, that while the magnitude of relationships was not overly large (maximum $R^2 = .22$), much criterion variation is still left unexplained. Attention should, therefore, be directed at investigating the moderating role of other factors (such as characteristics of subordinates and those of managers, task, company environments, and organizations) in determining the relationship between managerial behavior and effectiveness. Thus, a thorough mapping of moderator variables is necessary before such knowledge can be used meaningfully in organizations with any strong probability of success. On the positive side, however, the results of this research suggest that organizations should pursue a contingency approach in improving organizational effectiveness. Action to enhance effectiveness should focus on both leadership behavior and organizational climate.

REFERENCES

- Andrews, J. D. W. (1967). The achievement motive and advancement in two types of organizations. *Journal of Personality and Social Psychology*, 6, 163-168.

- Ansari, M. A. (1980). Organizational climate: Homogeneity within and heterogeneity between organizations. *Journal of Social and Economic Studies*, 8, 89-96.
- Ansari, M. A. (1986). Need for nurturant-task leaders in India: Some empirical evidence. *Management and Labor Studies*, 11, 26-36.
- Ansari, M A. (1987). Effects of leader persistence and leader behavior on leadership perceptions. *Pakistan Journal of Psychological Research*, 2, 1-10.
- Ansari, M. A. (1987). *Managing people at work: Styles and strategies*. New Delhi: Unpublished ICSSR Project Report.
- Ansari, M. A., & Shukla, R. (1987). Effects of group performance and leader behavior on leadership perceptions. *Psychological Studies*, 32, 111-118.
- Ansari, M. A., Baumgartel, H., & Sullivan, G. (1982). The personal orientation-organizational climate fit and managerial success. *Human Relations*, 35, 1159-1178.
- Arnold, H. J. (1952). Moderator variables: A classification of conceptual, analytic, and psychometric issues. *Organizational Behavior and Human Performance*, 29, 143-74.
- Bass, B. M. (1981). *Stogdill's handbook of leadership research*. New York: Free Press.
- Baumgartel, H. (1981). Human factors in the transfer of technology in national development. *Human Futures*, 4, 1-9.
- Baumgartel, H., Sullivan, G., & Dunn, L.E. (1978). How organizational climate and personality affect the pay-off from advanced management training sessions? *Kansas Business Review*, 3, 1-10.
- Chattopadhyay, G. P. (1975). Dependence in Indian culture: From mud huts to company board rooms. *Economic and Political Weekly*, 10, 30-38.
- Cook, J., & Wall, T. (1980). New work attitude measures of trust, organizational commitment and personal need non-fulfillment. *Journal of Occupational Psychology*, 53, 39-52.
- Dayal, I. (1976). *Cultural factors in designing performance appraisal system*. New Delhi: Shri Ram Centre for Industrial Relations and Human Resources.
- Fiedler, F. E. (1977). *A theory of leadership effectiveness*. New York: McGraw-Hill.
- Hassan, A. (1987). *Subordinate and task characteristics as moderators of leadership effectiveness*. Unpublished doctoral dissertation. Patna, India: Patna University.
- Hersey, P., & Blanchard, K. (1977). *Management of organizational behavior*. Englewood Cliffs, NJ: Prentice Hall.
- House, R. J. (1971). A path-goal theory of leadership effectiveness. *Administrative Science Quarterly*, 16, 321-38.
- House, R. J., & Dessler, G. (1974). The path-goal theory of leadership: Some post hoc and a priori tests. In J. G. Hunt & L. L. Larson.

- (Eds.), *Contingency approaches to leadership*. Carbondale, IL: Southern Illinois University Press.
- Howell, J. P., Dorfman, P. W., & Kerr, S. (1986). Moderator variables in leadership research. *Academy of Management Review*, 11, 88-102.
- Hunt, J. G., Osborn, R. M., & Larson, L. L. (1975). Upper level technical orientation of first level leadership within a non-contingency and contingency framework. *Academy of Management Journal*, 18, 475-88.
- Kakar, S. (1971). Authority patterns and subordinate behavior in Indian organizations. *Administrative Science Quarterly*, 16, 298-307.
- Kakar, S. (1978). *The inner world: A psychoanalytic study of childhood and society in India*. New Delhi: Oxford University Press.
- Litwin, G. H., & Stringer, R.A. (1968). *Motivation and Organizational climate*. Boston, MA: Harvard school of Business.
- Miner, J. B. (1978). Twenty years of research on role motivation theory of Managerial effectiveness. *Personnel Psychology*, 31, 739-760.
- Miner, J. B. (1980). *Theories of organizational behavior*. Hinsdale: Dryden.
- Mott, E. P. (1972). *The characteristics of effective organization*. New York: Harper & Row.
- Nie, N. H., Hull, C. H., Jenkins, J. G., Steinbrenner, K., & Bent, D. H. (1975). *Statistical package for the social sciences*. New York: McGraw-Hill.
- Nunnally, J. C. (1978). *Psychometric theory*. New York: McGraw-Hill.
- Pareek, U. (1968). A motivational paradigm of development. *Journal of Social Issues*, 24, 115-24.
- Rastogi, P. N. (1986). The culture of productivity. *Indian Journal of Industrial Relations*, 22, 148-67.
- Schnake, M. E. (1983). An empirical assessment of the effects of affective response in the measurement of organizational climate. *Personnel Psychology*, 36, 791-807.
- Sinha, J. B. P. (1970). *Development through behavior modification*. Calcutta: Allied.
- Sinha, J. B. P. (1980). *The nurturant-task leader: A model of effective executive*. New Delhi: Concept.
- Sinha, J. B. P. (1983). Further testing of a model of leadership effectiveness. *Indian Journal of Industrial Relations*, 19, 143-60.
- Sinha, J. B. P. (1985). Trends and issues in organizational behavior: A subjective perspective. *Abhigyan*, Spring, 24-36.
- Sinha, J. B. P., Pandey, D., Pandey, S.K., & Sinha, R.L. (1986, July). *Effective leadership styles in Indian work organizations*. Paper presented at the 21st International Congress of IAAP, Jerusalem, Israel.
- Stogdill, R. M. (1974). *Handbook of leadership: A survey of theory and research*. New York: Free Press

- Stone, E. F., & Hollenbeck, J. R. (1984). Some issues associated with the use of moderated regression. *Organizational Behavior and Human Performance*, 34, 195-213.
- Verma, N. (1986). A test of implicit personality theories of leadership. *Indian Journal of Industrial Relations*, 22, 189-202.
- Vroom, V. H., & Yetton, P. W. (1973). *Leadership and decision-making*. Pittsburgh: University of Pittsburgh Press.
- Yukl, G. A. (1981). *Leadership in Organizations*. Englewood Cliffs, NJ: Prentice Hall.