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THE MOTIVATIONAL STRATEGIES USED BY SUPERVISORS:
RELATIONSHIPS TO EFFECTIVENESS INDICATORS

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ABST ACT

This article introduces a new set of activities that a supervisor might use to heighten subordinate work motivation and performance. These activities, entitled "motivational strategies," consist of six separate dimensions: Personally Rewarding, Personally Punishing, Setting Goals, Designing Feedback Systems, Placing Personnel, and Designing Job Systems. Results show highly significant, positive relationships between five of the strategies and two independent ratings of effectiveness criteria. A comparison of these results with those obtained when using measures of "consideration" and "structure" as independent variables also is made. Results show the motivational strategies to be better predictors of effectiveness than "consideration" or "structure." Implications of the results for future research are discussed.

One of the most thoroughly researched areas in the behavioral sciences is that of leadership. Much of this research has been directed towards identifying the leader behavior dimensions which predict subordinate work performance. Unfortunately, recent reviews of much of this literature have concluded that no one set of leader dimensions consistently relate to given subordinate performance criteria (cf. Korman, 1966; Sales, 1966). One of the probable reasons for the previous inconclusive results is simply that improper leader activities were focused on. Thus, this article will introduce a new set of leader activities which are predicted to have significant associations with subordinate work effectiveness indicators. In addition, data will be presented which were collected to provide a preliminary test of these activities.

Leadership Effectiveness: Some Conceptual Guidelines

Before presenting the leader activities to be focused on in this research, it is necessary to address the problem of how these activities can heighten work effectiveness. It is proposed that a supervisor can increase his subordinates' levels of performance by first raising their levels of work motivation. A considerable amount of research supports the view that, holding ability constant, for most jobs highly motivated workers perform at significantly higher rates than do unmotivated employees (cf. Lawler, 1971; Porter and Lawler, 1968; Vroom, 1964). The supervisor who seeks to increase his subordinates' productivity, then, should engage in activities which directly increase his subordinates' motivation.

What are the general types of activities the supervisor might engage in to increase his subordinates' motivation? There is good reason and some empirical evidence to suggest that conditions in the organizational environment (e.g., reward systems, feedback systems, task structures, etc.) can have a substantial impact on individuals' motivation levels (cf. McGregor, 1960; Vroom, 1964). Therefore, the task of the supervisor who attempts to enhance subordinate motivation should be to create and develop the organizational conditions in which his subordinates perform such that they become more potent motivating factors.

There are several ways that these organizational conditions might enhance subordinate motivation. First, conditions might be developed in such a way that individuals working within them can more fully satisfy their personal needs or goals through highly motivated behavior (i.e., the harder the individual works, the greater probability that his needs will be satisfied). Second, environmental conditions could be designed such that they provide direction for individual task accomplishment. Finally, organizational conditions might be developed such that they enhance insufficient individual "activation" levels (Scott, 1966). It would seem that the supervisor who will be most effective in motivating his subordinates is the one who creates a working environment for his subordinates such that one or more of the above provisions is in effect.

Suggesting that the supervisor who creates conditions in his subordinates' environment is simply engaging in certain "activities" or "behaviors" may be slightly misleading. The reason for this is that through their constant usage in scientific literature and business

organizations, phrases such as "leader behaviors" or "supervisor activities" have begun to connote actions that are unprogrammed or rather superficially developed by the leader. These definitions would seem to be highly inconsistent with the concept of the supervisor as a creator or developer of organizational conditions.

Therefore, it is proposed that the actual techniques supervisors use to create conditions and therefore motivate subordinates, henceforth be labeled "motivational strategies." This phrase implies that each of the techniques is in reality an action plan devised and consciously programmed by the leader to motivate his subordinates. Clearly, the term strategy more accurately reflects the idea of the supervisor as a creator of organizational conditions than the more familiar terms of activity or behavior. In addition, the term strategy exemplifies the rather complex nature of many of the specific motivational techniques to be introduced.

Factors other than the motivational strategies used by supervisors also might influence the conditions in which subordinates perform their jobs. Specifically, organizational policies (e.g., an information feedback system will be used, all subordinates will work in triads, etc.) suggested and enforced by upper levels of management may determine many of the conditions subordinates work within. This does not negate the fact that the supervisor might use the organizational surround to enhance subordinate motivation. In fact, it seems clear that the supervisor can increase motivation and performance by: (a) influencing conditions not noticeably affected by organizational policies and/or (b) developing conditions affected by organizational policies but to a much fuller extent (e.g., the supervisor gives enriched or complete

feedback to subordinates via the feedback system). It should be understood that a supervisor functioning in an environment with a given organizational policy that affects organizational conditions is not considered to be actively using a motivational strategy. Rather, a supervisor uses a strategy only if he engages in actions that alter the conditions previously established by the organization and its policies.

The Motivational Strategies Used by Supervisors

Each of the motivational strategies to be presented involve the supervisor's using his own latitude to affect different specific conditions in his subordinate's working environment. It is likely that the different conditions the supervisor might affect require that he have different amounts of control over critical organizational resources and policies. That is, influencing broad organizational conditions requires the supervisor to exercise a greater degree of control than changing rather small elements in the organization. Therefore, the strategies have been ordered in terms of the supervisory control which is necessary for their implementation.

The strategies requiring the least amount of supervisory control have been entitled Personally Rewarding and Personally Punishing. Although any behavior, strategy or activity on the part of the supervisor might theoretically be considered either rewarding or punishing to subordinates, these particular motivational strategies will in large part refer to those interpersonal rewards or punishments directly distributed to subordinates by the supervisor in response to subordinate behavior. Obviously, if rewards and/or punishments were given for any subordinate behavior or action, it is unlikely that they would have any

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motivational value. It is suggested, then, that only when rewards are given for outstanding work performance, and/or punishments distributed for poor work performance will rewards and punishments succeed in increasing a subordinate's motivation and performance. Examples of personal rewards a supervisor might use are a pat on the back or a simple congratulations for a job well done. Verbal criticism or a disapproving frown are possible personal punishments.

The impact of such rewarding and punishing behaviors as those outlined above upon individual performance and learning have been studied by learning theorists for many years (cf. Skinner, 1953). Most recently, social psychologists have begun studying the effects of many of the same procedures on the performance of individuals working in organizational systems (e.g., Nord, 1969; Jablonsky and De Vries, 1972; Adam, 1972). In general, these studies have concluded that subordinate work performance can be shaped by the supervisor if the rewarding/punishing conditions are manipulated correctly (cf. Adam, 1972; Kennedy and Willcutt, 1964). Also, there is some evidence to show that the impact of the personally rewarding and punishing activities will be greatest if the time lag between the desired subordinate behavior and following supervisory action is minimized. Finally, research has shown that for maximum effectiveness rewards and punishments should be presented to subordinates following desired behaviors frequently and on a variable ratio schedule (Jablonsky and De Vries, 1972).

A strategy that might be considered to require slightly more supervisory control than Personally Rewarding and Personally Punishing is that of Setting Goals. This motivational strategy amounts to the supervisor establishing specific performance objectives, goals, or standards

for his subordinate to achieve. For example, a typical goal setting event might be for the supervisor to instruct a subordinate to sell eight cases of house paint in one week or to improve the previous month's performance by five percent.

A substantial amount of research (most of which has not been related to the leadership area) has investigated the impact of performance goals on individual work effort and productivity (e.g., Locke, 1966; Lawrence and Smith, 1955; Carroll and Tosi, 1969; Meyer, Kay, and French, 1965). Most of these studies have examined the effects of different facets of the goal setting process on subordinate performance. For instance, in a series of laboratory studies Locke and his colleagues demonstrated that specific hard goals accepted by subjects produce a higher level of individual performance than easy goals or goals of "do your best" (see Locke, 1968 for a review of this research). In the management by objectives area, Meyer, Kay, and French (1965) compared a traditional performance review with a mutual goal setting approach in which there were more frequent discussions of performance and an emphasis on mutual problem solving. The field experiment used relatively small samples but a three month follow-up seemed to indicate that the most substantial influence on performance was not the mutual nature of the goal setting, but whether specific performance goals had been set at all.

All in all, the results of these and other studies suggest that goal setting can have a positive impact on subordinate motivation and performance. These results might be explained by the propositions outlined earlier. At that time it was suggested, in part, that conditions created by a supervisor will heighten subordinate motivation if these conditions provide a direction for subordinate task accomplishment.

Performance goals are a clear example of conditions which give an individual every indication of where to direct his effort. More exactly, goals or objectives would seem to enhance the subordinates' understanding of the task on which he is working as well as providing the individual with a clear target at which to direct his effort.

The next strategy to be discussed has been entitled Designing Information Feedback Systems. Many organizations have systems which convey previous performance data to individual workers on a regular basis. Thus, workers receive information concerning their performance levels from the previous month, week, or day. There is considerable evidence in the literature to suggest that feedback of this type can increase the motivation and performance levels of workers (e.g., Bass and Vaughn, 1968; Bilodeau and Bilodeau, 1961; Vroom, 1964). This literature also suggests, however, that more comprehensive, complete feedback can be even more effective in increasing subordinates' motivation levels. Thus, a supervisor, operating in an organization which utilizes a feedback system, might be able to improve his subordinates' work performance by redesigning or developing that system so that more complete information concerning subordinates' previous performance levels is available. The supervisor might accomplish this by adding older data to the report for comparison purposes, discussing and analyzing the report thoroughly with subordinates, or giving feedback to subordinates more frequently than is required.

By enhancing the feedback subordinates receive about their work performance, the supervisor is, in essence, producing conditions which facilitate subordinate motivation and performance. Clearly, improved feedback furnishes greater information to subordinates concerning the

"correctness" or appropriateness of the methods they currently are using to perform their duties. Thus, additional feedback allows subordinates to understand and correct inappropriate work methods while strongly reinforcing successful work activities. Additionally, Vroom (1964) has suggested that more comprehensive feedback may actually influence an individual's desire for improved performance. That is, complete feedback might increase the value of high level performance for the employee. In total, it seems clear that the supervisor can have a major impact on a subordinate's level of motivation by positively altering the feedback conditions in the organization.

A strategy which would seem to require more supervisory control to implement than Designing Feedback Systems is that of Placing Personnel. This motivational strategy refers to the supervisor's assignment or allocation of subordinates to existing jobs or tasks which challenge their operational and/or interpersonal skills. The supervisor using this strategy, then, evaluates the salient characteristics of the jobs under his control while also assessing the needs and skills of his immediate subordinates. He then attempts to place individuals on jobs that he feels are sufficiently complex to prove challenging or demanding to them. For example, a supervisor using this strategy might try to place an individual who has mastered the management of a small retail department in a larger department where his duties and responsibilities were substantially greater. When this strategy is effectively applied, individual subordinates are able to more fully satisfy their own needs for growth, development, and worthwhile accomplishment since they are working on tasks which they perceive as sufficiently complex and challenging to demand that an individual's full working potential be utilized.

Once again, the supervisor using this strategy is creating conditions under which his subordinates can satisfy their needs and goals. He is producing these conditions, however, by moving subordinates to existing jobs which are challenging to them as individuals--not by tampering with jobs or the physical environment of the organization. Thus, for this strategy to be effective it seems essential that the supervisor correctly assess his subordinates' needs and skills and then place them in jobs in which they can fulfill those needs and use their skills to the fullest extent.

A number of studies have provided some evidence supporting the motivating potential of this strategy (e.g., Betz, 1966; Turner and Lawrence, 1965; Smelser, 1961). For example, a laboratory study by Smelser (1961) demonstrated that individuals will perform better when appropriately matched to a task. This researcher first determined subjects' scores on a dominance scale. Then, based on these results, he appropriately matched some groups of individuals with tasks while permitting members of other groups to involve their own division of labor. For still other groups, he inappropriately matched individuals with tasks. Results showed that individuals performed significantly better in the appropriate match condition than the other two conditions. In an investigation carried out in the field, Hackman and Lawler (1971) found that individuals will have higher levels of motivation and perform higher quality work when they are placed on complex jobs (i.e., those high in variety, autonomy, task identity, and feedback). These results were even stronger, however, when individual workers were desirous of higher order need satisfactions.

All in all, these results suggest that when many individuals are placed on jobs they perceive as complex or challenging, their motivation

and performance levels are likely to increase. For the most positive results using this strategy, however, it does seem essential for the supervisor to assess the skills and needs of his subordinates prior to placement and to attempt to match individuals having higher order needs and skills with the more challenging jobs.

A further motivational strategy has been entitled Designing Job Systems. In discussing the motivational strategy of Placing Personnel, it was suggested that job conditions can alter substantially an individual's motivational state. More specifically, it was proposed that when many individuals are placed on complex jobs their motivation levels are likely to improve since, under these conditions, it is possible for personal needs to be satisfied and goals achieved. Unfortunately, the Placing strategy may be inadequate in providing each employee with a complex, challenging job. The most likely reason for this is simply that there are an insufficient number of jobs in the supervisor's unit which would be considered challenging by employees. This may be due either to the actual content of the jobs or to the skill levels of the subordinates.

If this is the situation, some other motivational strategy would seem to be needed to capture all the motivating potential from the individual-job relationship. The present strategy is intended to fill the void left if the Placing Personnel strategy cannot be effectively used. This strategy consists of the supervisor designing, changing, or developing his subordinates' existing jobs so that the jobs become more challenging. Unlike the Placing strategy which emphasized the placement of employees on given jobs, the Designing

Job System strategy emphasizes the development of the job the individual currently is holding.

There are a number of job characteristics the supervisor can change or develop. For example, he might give the subordinate autonomy in excess of that called for in the subordinate's job description. Also, he might give the subordinate additional feedback in his job, a greater variety of operations to perform, or more generally, the supervisor might "push down" a large portion of his overall supervisory responsibilities. In sum, in implementing the Designing Job System strategy the supervisor is enriching his subordinates' present jobs by making significant changes in the content of the jobs themselves.

The evidence cited in the discussion of the Placing strategy is once again relevant there (i.e., Turner and Lawrence, 1965; Hackman and Lawler, 1971; etc.). This research demonstrates the positive motivational affects complex jobs can have on individual workers. There is a further research area which has examined the impact of actual job changes or enrichment programs on individual's motivation and performance (e.g., Trist, Higgin, Murray, and Pollock, 1963; Davis, 1966; Ford, 1969; Paul, Robertson, and Herzberg, 1969; Kilbridge, 1960; Kuriloff, 1966). For example, Kilbridge (1960) reports a case in which the jobs of water pump assemblers were enriched such that they performed many facets of the assembly and were responsible for product quality. Results showed that after job enrichment performance quantity and quality improved substantially.

In total, the results of this and other studies suggest that a supervisor making substantive alterations in the jobs of many of his subordinates in the direction of greater complexity, may significantly increase the motivation of his subordinates to perform well in their jobs. Again, it does seem apparent that individuals with high needs for growth and development are likely to respond most positively to these complex, redesigned jobs, since, in these jobs, it is more likely that they can satisfy these higher level needs by performing well.

Two strategies which may require more supervisory control than Designing Jobs are entitled Materially Rewarding and Materially Punishing. These strategies are identical to the Personally Rewarding and Punishing strategies discussed earlier with one major exception--material rather than personal rewards and punishments are distributed to subordinates by the supervisor in response to subordinate behavior. That is, if the supervisor were to use these strategies, he would give material rewards for good subordinate work performance and material punishments for poor work performance. Typical material rewards a supervisor might provide his subordinates are a monetary bonus or the afternoon off with pay. A downward adjustment in salary or sending the subordinate home for a day without pay are examples of material punishments.

The research evidence reported earlier--which suggests that rewarding and punishing can shape individual behavior--is again relevant here (e.g., Nord, 1969; Jablonsky and De Vries, 1972). It might be noted that this research has focused on the effects of materially as well as personally rewarding and punishing activities. In fact, results have shown that in many cases there is relatively little difference in the

impact that interpersonal and material rewards have on subordinate behavior (Adam, 1972). All in all, these results indicate that supervisors can enhance subordinate work effectiveness by correctly applying the Materially Rewarding, and Punishing strategies.

Finally, the strategy which may require the greatest amount of supervisory control to implement has been entitled Designing Reward Systems. This strategy consists of the supervisor altering the reward system under which his subordinates work. A substantial amount of research suggests that the reward systems that provide the most meaningful or valuable incentive to the worker will be those that are most likely to enhance subordinate motivation (see Lawler, 1971 for a review). The supervisor might improve his subordinates' level of performance significantly, then, by designing his unit's current reward system so that more meaningful incentives are obtained by individuals for better performance. For example, in assessing his subordinates' needs and abilities the supervisor might conclude that certain workers would perform better with a piece rate system or that his unit's performance as a whole could be improved considerably if a 5% monthly bonus plan were installed. In any case, this motivational strategy is likely to have a positive impact on subordinate performance if the supervisor is able to evaluate correctly his subordinates' needs (perhaps through a participative process) and then alter the reward conditions in such a way that more meaningful (and need satisfying) incentives are obtained by workers for producing good work.

Summary and Hypotheses

Nine specific motivational strategies which might be used by supervisors have been proposed: Personally Rewarding, Personally Punishing,

Setting Goals, Designing Feedback Systems, Placing Personnel, Designing Job Systems, Materially Rewarding, Materially Punishing, and Designing Reward Systems. It is expected that the use of each of these strategies will lead to higher subordinate motivation and, hence, performance.

Thus, it is hypothesized that the more frequently a focal supervisor applies each of the motivational strategies: (a) the more effective he will be rated in motivating his subordinates; and (b) the greater will be his subordinates' rated productivity.

The research also will compare and contrast the above motivational strategies with the thoroughly researched "consideration" and "initiating structure" leadership dimensions. No specific relationships are proposed between the strategies and the latter dimensions, and the comparative analysis is purely exploratory. This portion of the research should be informative and interesting, however, since "consideration" and "structure" have received such widespread recognition and acceptance in academic and business circles while the motivational strategies are new and totally untested.

METHOD

Research Setting and Subjects

The research was carried out in ten stores of a nationwide retail chain located in Connecticut and Massachusetts. The total number of individuals employed in each of the ten stores ranged from 82 to 574 with the median being about 360 people. The group receiving primary attention in the study were managers at the middle level in each of the stores. The number of these individuals working within each store ranged from 1 to 7 with the median being about 6. Forty-five middle level managers (focal group) holding nine different jobs were examined

in the research. These included managers responsible for the stocking and selling of store merchandise, managers in charge of display operations, managers responsible for store accounting and auditing functions, etc.

Data also were collected from the store manager ($N = 10$), assistant store manager ($N = 7$) if there was one, and a sample of each focal manager's subordinates ($N = 121$). All store, assistant and middle managers were male, while the subordinate group was about half male and half female.

Procedure

The data were collected on site at each of the ten participating stores by the author and his research assistant. It took between one and three days to complete the data collection in each store. The amount of time needed varied according to the number of subjects participating and the scheduling difficulties that the researchers encountered.

The general research procedures followed for each group of participants in all locations are discussed below.

1. Store managers and assistant managers. Each store manager and assistant manager met individually with one of the researchers. After being assured that all the information he provided would be treated with the strictest confidence, the data collection session began with an open-ended interview. Each manager was asked to describe his major responsibilities and some of the problems he encountered in performing his job. The purpose of these questions was to gather potentially important information and to enable the researcher to establish a high level of rapport with the manager (Alderfer, 1968).

Then the interview turned to more specific questions concerning the motivational strategies each middle manager within the store used and the effectiveness of each middle manager in supervising his subordinates. The total interview with the store and assistant manager took between 30 and 60 minutes to complete.

2. Middle level managers. Each focal group member met individually with one of the researchers. The confidentiality of the study was emphasized to each manager. A brief interview was then conducted in which the manager was asked to describe his major responsibilities as well as any basic difficulties he encountered in the every day performance of his job. The manager was then questioned concerning the frequency at which he applied each of the motivational strategies.

3. Subordinates (of the middle managers). A sample of each focal manager's subordinates also participated in the study. They were selected by the store or assistant manager after the researchers had requested a "representative sample" of about 3-4 subordinates per middle manager. This method was found to be necessary because of severe coordination and scheduling difficulties encountered in gathering data from this group of subjects. The number of subordinates actually taking part in the study ranged from 1-18 per middle manager. This wide range was due to the job function of the middle manager (some managers supervised just two individuals), the jobs of subordinates (for certain jobs individuals could not take time to participate), and various scheduling difficulties.

In each store, all participating subordinates met simultaneously with the researcher. The confidentiality of the study was emphasized and the subordinates were asked to delete any information that might

identify them personally on the form they were to complete. They were asked to write their supervisor's name on the final page of the questionnaire, however. The questionnaire, which took between 20 and 45 minutes to complete, included items concerning subordinate perceptions of their supervisor's motivational strategies and their affective reactions toward their job and organization.

Instruments and Measures

Motivational Strategies

Data regarding the frequency at which middle managers used each of the motivational strategies outlined earlier were collected from store managers, middle managers, and subordinates.³ After beginning the data collection phase of the research, it was found that the use of the Materially Rewarding, Materially Punishing, and Designing Reward System strategies was greatly restricted by policies of the organization. Variance needed for meaningful statistical analyses would be impossible to obtain; thus, it was decided to eliminate these three strategies from the study.

The methods used to collect data regarding the middle managers' strategies varied in each of the three respondent groups. These methods are described below.

Subordinates. On their questionnaire, each subordinate was asked to describe "how often" his immediate supervisor used each motivational strategy on a 1 (never) to 7 (always) Likert-type scale. One item was used to tap each of the six strategies. These items are listed below:

(a) Personally Rewarding: My supervisor rewards me for producing good work by congratulating me, patting me on the back, giving a nod or

smile indicating a job well done, or engaging in similar supportive activities.

(b) Personally Punishing: My supervisor punishes me for producing poor work by yelling at me, ignoring me, or, in general, acting unpleasantly towards me.

(c) Setting Goals: My supervisor sets specific performance goals or quotas for me to achieve (i.e., sell that case of hammers in one week).

(d) Designing Feedback Systems: My supervisor changes or develops the information feedback system (i.e., profit/loss statement or merchandise condition report) I operate under (e.g., giving information more frequently, adding data to the report, etc.) so that I receive more complete information about how well I am performing my job.

(e) Placing Personnel: My supervisor assigns me to jobs or tasks on which I am challenged or "pushed" to perform well.

(f) Designing Job Systems: My supervisor changes or develops my present job (e.g., giving more or different duties, giving more responsibility, independence, etc.) so that the job becomes more challenging or demanding to me.

Responses of each focal manager's subordinates were averaged to obtain reliable summary scores for each of the six strategies.

Store managers. Statements analogous to those in the subordinates' questionnaires were read to the store managers during their interview. After each statement the researchers asked the store manager "how often" each of his middle managers used the particular technique. The researcher recorded all responses on 7-point Likert-type scales in the interview schedule.

Middle managers. A description of each of the six motivational strategies was included in the focal manager's questionnaire. In the follow-up interview, the researcher repeated each of the descriptive statements and asked the focal manager, "About how often do you tend to behave in this manner toward your subordinates?" The researcher recorded the responses in the interview schedule on 7-point Likert-type scales.

Composite indices of each focal manager's motivational strategies were then formed by averaging the subordinate, store manager and focal manager reports. For example, a Setting Goals composite index was formed for each focal manager by averaging his self-rating, his subordinates' average rating, and his store manager's rating of that strategy. The moderately high inter-rater reliabilities across the six strategies justify the composite indices (see Table 1). Reliabilities were obtained by: (a) calculating the median intercorrelation among raters for each motivational strategy; and (b) adjusting these coefficients using Spearman-Brown procedures.

Insert Table 1 About Here

These composite measures should most accurately reflect the methods a middle manager actually uses to motivate his subordinates since perceptions from three independent sources were combined. Therefore, the composite strategy indices will be used in all later analyses.

The relationships among the six composite motivational strategy indices are presented in Table 2. Although there is a tendency for the six strategies to be positively related to one another, only one of the correlations is of substantial magnitude: middle managers seen as

placing personnel frequently are also seen as setting goals frequently. In total, the level of interrelationship among the strategies does not mitigate against their use as separate dimensions in the substantive analyses. Possible reasons for the positive intercorrelations among strategies will be discussed later.

Insert Table 2 About Here

Effectiveness Measures

During their respective interviews, store and assistant managers rated the effectiveness of each middle manager within their store on two separate dimensions: (1) How effective each focal manager was in getting his subordinates to work hard and well; (2) The productivity of the focal manager's subordinates. All responses were recorded on 7-point Likert-type scales.

The relationships between store and assistant manager ratings of focal manager effectiveness were substantially different. There was some agreement between raters regarding the effectiveness of the focal manager in motivating his employees ($r = .41$) but little agreement on the item measuring the effectiveness of subordinates ($r = -.06$). Thus, it was decided not to combine store and assistant manager ratings on each of the two effectiveness measures.

Consideration and Initiating Structure

Each focal manager was asked to complete the revised form of the Leadership Opinion Questionnaire (Fleishman, 1957(b)) which yields scores on the traditional "consideration" and "initiating structure" dimensions. Each subordinate was administered the Leadership Behavior Description Questionnaire (Fleishman, 1957(a)) which yields scores on

the same two dimensions. Responses of each focal manager's subordinates were then averaged to obtain reliable summary scores on each of the two dimensions.

Results

Relationships between Motivational Strategies and Effectiveness Indicators

It was hypothesized that the more frequently the middle manager applied each of the motivational strategies, the more effective he would be rated in motivating his subordinates and the more productive would be his subordinates. Relationships between the composite strategy indices and store and assistant manager ratings of the two effectiveness criteria are given in Table 3.

Insert Table 3 About Here

In general, the data provide substantial support for the hypothesis above. This is particularly the case as regards the "Motivational Effectiveness" variable (i.e., the effectiveness of the middle manager in getting his subordinates to work hard and well). Results show that five of the strategies (i.e., Personally Rewarding, Setting Goals, Designing Feedback Systems, Placing Personnel, and Designing Job Systems) are related positively and significantly to both ratings of "Motivational Effectiveness." The sixth strategy (i.e., Personally Punishing), on the other hand, is related negatively to both managers' ratings of "Motivational Effectiveness."

Results also show that the Personally Rewarding and Designing Job Systems strategies are positively and significantly related to store

managers' ratings of the subordinate effectiveness measure. In addition, Designing Feedback Systems is related significantly to assistant managers' ratings of subordinate effectiveness.

In sum, results show that focal managers who personally reward their subordinates for good work, set performance objectives, place workers on challenging jobs, redesign jobs, and redesign feedback systems are rated by store and assistant managers as most effective in motivating their subordinates. Additionally, in many cases these same focal managers are rated as having very productive subordinates. On the other hand, results indicate that the more frequently focal managers criticize their subordinates for poor work, the lower their rating on both effectiveness measures.⁴

The Motivational Strategies and "Consideration" and "Structure:" A Comparison

The research made it possible to compare and contrast the results obtained when using the motivational strategy indices with those obtained when using the traditional "consideration" and "structure" leader dimensions. In the first part of this comparison, relationships between the strategies and the "consideration" and "structure" measures were examined. These correlations are reported in Table 4.

Insert Table 4 About Here

Results indicate that focal manager reports of "consideration" (as measured on the LOQ) are not related substantially to any of the motivational strategies. Also, focal manager ratings of "structure" are related significantly to only one of the strategies--Designing Feedback Systems.

The correlations between subordinate reports of focal managers' "consideration" and "structure" (as measured on the LBDQ) and the composite strategy indices are more interesting. "Consideration" is related positively and significantly to the Personally Rewarding strategy while negatively and significantly related to the Personally Punishing strategy. Subordinate reports of "structure," on the other hand, are positively and significantly related to the Setting Goals and Placing Personnel strategies.

These relationships become more understandable if one closely examines the actual questions comprising the LBDQ. Some of the items reflecting "structure" are similar to those which might reflect Setting Goals or Placing Personnel (e.g., He emphasizes the meeting of deadlines). In addition, a few of the "consideration" items reflect the Personally Rewarding strategy (e.g., He expresses appreciation when one of us does a good job).

While significant, positive relationships do exist between subordinate reports of "consideration" and "structure" and three of the composite motivational strategy indices, they are not of sufficient magnitude to suggest that the leader activities measured by both approaches are identical in nature. Rather, as has been previously suggested, it would seem that the essence of a few of the strategies is reflected in portions of the more general, traditional factors. Because of this similarity some substantial relationships would be expected, yet to propose that the motivational strategies and "consideration" and "structure" measures reflect analogous leader activities would seem to be unfounded.

Relationships between "Consideration" and "Structure" and Effectiveness Indicators

Since there is some overlap between the motivational strategies and "consideration" and "structure," it would seem appropriate to determine if the two leadership approaches related similarly to effectiveness criteria. Relationships between focal manager and subordinate ratings of "consideration" and "structure" and store and assistant manager estimates of effectiveness are presented in Table 5.

Insert Table 5 About Here

Results show that focal managers' reports of "structure" are related significantly to store manager ratings of subordinate effectiveness and focal managers' motivational effectiveness. No significant relationships were obtained between the two effectiveness ratings and subordinate reports of "consideration" and "structure" or middle manager reports of "consideration."

All in all, the data indicate that the "consideration" and "structure" dimensions (based on either subordinate or middle manager reports) are relatively poor predictors of a middle manager's rated effectiveness. This is especially noticeable if the above relationships are contrasted to the strong, positive correlations found between the motivational strategies and the two effectiveness ratings (see Table 3). Clearly, in this particular organization with these measures of effectiveness, the motivational strategies are better predictors of middle manager effectiveness than the "consideration" and "structure" dimensions.

DISCUSSION

The results of this study suggest that five of the proposed strategies of motivation (i.e., Personally Rewarding, Setting Goals, Designing Feedback Systems, Placing Personnel, and Designing Job Systems) were good predictors of a middle manager's rated effectiveness in motivating his subordinates as well as being fair predictors of the effectiveness of a manager's subordinates in performing their jobs. The only strategy which did not predict a middle manager's effectiveness was that of Personally Punishing which was negatively related to both effectiveness measures.

It is possible that the strategies as a group were more substantially related to the "motivational effectiveness" measure than the "subordinate effectiveness" measure because factors beyond the control of the supervisor influenced the actual productivity of subordinates. That is, it may be that subordinate ability, sales in different departments and a variety of other situational variables accounted for a good portion of the "subordinate effectiveness" variance. This was probably not the case with the "motivational effectiveness" measure. This performance indicator tapped only the effectiveness of the supervisor in motivating his subordinates--which is exactly what the motivational strategies were designed to predict.

All in all, the results outlined above are clearly superior to those obtained when using the "consideration" and "structure" leader dimensions. It will be recalled that very few of the relationships between these two dimensions and the effectiveness indices reached significant levels (see Table 5). These overall comparative results may have been due to the fact that the motivational strategies involved the

supervisor's making specific alterations in important structural conditions within which subordinates work (e.g., Designing Job Systems) as well as in creating motivating interpersonal conditions (e.g., Personally Rewarding). "Consideration" and "structure," on the other hand, consist basically of leader interpersonal and task clarification actions and are quite general in nature. Thus, the relevant supervisory restructuring activities included in the strategy concept may have accounted for much of the performance variance not explained by the traditional leader dimensions.

The implication of these findings is that the manager who uses the entire organizational surround to create conditions under which his subordinates can satisfy important needs and receive accurate direction for goal accomplishment is likely to successfully motivate his subordinates toward higher work performance. This manager, then, is not merely using interpersonal or task clarification activities to stimulate performance but rather is developing and enhancing a variety of specific organizational sub-systems in an effort to heighten motivation and performance. Since correlational methods were used throughout the research, however, one must be careful in making causal inferences about the relationships between the strategies and effectiveness indices. Further research would seem to be needed before any "causal arrow" could rightfully be drawn. This research would require that conditions in the organizational environment other than the strategies be held constant while each strategy is experimentally manipulated and performance criteria carefully monitored. Ideally, this research would be conducted in a controlled field situation or in a simulated organization.

The significant relationships between the strategies and effectiveness criteria in this study of one organization should not

prevent researchers from looking for moderating variables which may strengthen the above associations. In fact, one next step in this research program might be to identify some of the variables within the organization which, when present, lead to higher or lower relationships between the strategies and effectiveness measures. These variables might include: (a) specific characteristics of the situation or problems confronting the manager, (b) the need states of the subordinates subjected to the strategies, or (c) more global or structural organizational characteristics such as organization size, climate, etc. In any event, systematic identification of important variables within the organization which moderate the strategy-performance relationships should soon be attempted.

Further refinement of the motivational strategies also is called for by the research. For example, the generality of some of the moderately high correlations among the strategies should be tested. The descriptions of the strategies were actually quite dissimilar and, therefore, it may be that the results are to some extent organization specific. That is, it may be that in the particular organization where the study took place, middle level managers tend to use several strategies in conjunction with one another. The same might not hold true of supervisors in other organizations. Further research in a variety of organizations with supervisors at different levels would seem to be needed to determine if the strategies are, in fact, empirically and conceptually independent.

In addition, more work needs to be done to determine what specific aspects of the various strategies are most responsible for the relationships between the strategies and effectiveness criteria. That is,

can the strategies be narrowed down to an even more exact level so that the specific actions most important in affecting a subordinate's performance are identifiable. For example, is the critical feature of the Designing Job System strategy designing a job such that the subordinate has more responsibility, receives more feedback, becomes more independent, etc.? Is the Setting Goals strategy more effective when goals are set participatively, when goals are clear, or difficult? These and other questions cannot be easily answered with the measures used in the current research. Clearly, additional research on the critical characteristics of the motivational strategies is called for.

Finally, more research in a variety of organizations needs to be conducted to test the impact of other strategies, relevant to the "creating conditions" concept, on individual performance and effectiveness. Specifically, the three strategies that were excluded from the present research (i.e., Materially Rewarding, Materially Punishing, Designing Reward Systems) would seem to deserve further attention. In addition, the impact of a motivational strategy concerned solely with the social or interpersonal aspects of a subordinate's working life (perhaps entitled Designing Social Systems) would seem to invite more research.

FOOTNOTES

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³ Data were also collected from assistant managers. Due to the limited number of assistant manager responses, however, it was decided to eliminate their ratings of the motivational strategies from future analyses.

⁴ Approximately the same results as those outlined above were obtained when using subordinate reports of the middle managers' strategies rather than the composite indices.

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Table 1

Inter-Rater (i.e., Store Manager, Subordinate, Middle Manager)
Reliabilities for Each Motivational Strategy

Motivational Strategy	Reliability Estimate
Personally Rewarding	.57
Personally Punishing	.65
Setting Goals	.60
Designing Feedback Systems	.61
Placing Personnel	.51
Designing Job Systems	.34

Table 2

Means, Standard Deviations and Intercorrelations of the Six Composite Strategy Indices

	\bar{X}	SD	Personally Rewarding	Personally Punishing	Setting Goals	Designing Feedback Systems	Placing Personnel	Designing Job Systems
Personally Rewarding	4.67	.91	-					
Personally Punishing	2.76	1.03	-.08	-				
Setting Goals	4.93	1.13	.32	.26	-			
Designing Feedback Systems	4.07	1.63	.48*	.12	.42*	-		
Placing Personnel	4.46	.99	.28	-.08	.64*	.14	-	
Designing Job Systems	4.56	.74	.34	-.07	.26	.17	.41*	-

Note: N = 45

*p < .01 (two-tailed test)

Table 3

Relationships between Middle Manager Composite Strategy Indices and
Store and Assistant Manager Effectiveness Ratings

Motivational Strategy	Motivational Effectiveness		Subordinate Effectiveness	
	Store Manager Ratings	Assistant Manager Ratings	Store Manager Ratings	Assistant Manager Ratings
Personally Rewarding	.43**	.29*	.50**	.11
Personally Punishing	-.03	-.35*	-.16	.01
Setting Goals	.55**	.29*	.12	.14
Designing Feedback Systems	.38**	.37**	.21	.34*
Placing Personnel	.45**	.38**	.20	.13
Designing Job Systems	.45**	.27*	.45**	-.09

Note: N = 45 for Store Manager Ratings

N = 39 for Assistant Manager Ratings

**p < .01 (one-tailed test)

*p < .05

Table 4

Relationships between Middle Manager Composite Motivational Strategy Indices
and "Consideration" and "Initiating Structure" Scores
(Middle Manager and Subordinate Reports)

Motivational Strategy	Middle Manager Reports		Subordinate Reports	
	Consideration	Structure	Consideration	Structure
Personally Rewarding	.15	.20	.50*	-.07
Personally Punishing	-.10	.21	-.49*	.31
Setting Goals	.18	.36	-.18	.44*
Designing Feedback Systems	.12	.46*	.37	.09
Placing Personnel	.19	.23	-.09	.43*
Designing Job Systems	.22	.26	.20	.19

Note: N = 45

*p < .01 (two-tailed test)

Table 5

Relationships between "Consideration" and "Initiating Structure" Scores
(Middle Manager and Subordinate Reports) and Store Manager and
Assistant Manager Effectiveness Ratings

	Motivational Effectiveness		Subordinate Effectiveness	
	Store Manager Ratings	Assistant Manager Ratings	Store Manager Ratings	Assistant Manager Ratings
<u>Middle Manager Reports</u>				
"Consideration"	.18	.20	.01	.04
"Structure"	.31*	.11	.30*	.12
<u>Subordinate Reports</u>				
"Consideration"	.09	.12	.21	.03
"Structure"	.19	.23	.01	.11

Note: N = 45 for Store Manager Ratings

N = 39 for Assistant Manager Ratings

*p < .05 (one-tailed test)

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