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Organizational Behavior: The Central Role of Motivation

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This review of the organizational behavior literature posits that the prime research focus should be the behavior of individuals in organizational settings rather than their affective reactions to those settings. Individual behavior is discussed in terms of motivation theory, with emphasis on the antecedents of goals and goal acceptance, feedback, and attributions, and on the consequences of performance. Factors such as leadership and job design are viewed as affecting behavior through their effects on motivation. The implications of the motivational model for researchers and practitioners are discussed.

Organizational behavior is, at its best, to use Schneider's (1985) felicitous term, schizophrenic. It has as its focus actions of and in organizations. As such, it draws upon the disciplines of psychology and sociology, and less strongly upon political science and quantitative methods. The student of organizational behavior is interested in analyzing phenomena at the individual, group, and organizational levels. All three are embedded within the cultural and societal levels of analysis.

This article focuses on the behavior of individuals within an organizational setting. Scholars of organizational behavior try to understand and predict the behavior of people in their daily lives: the quantity and quality of work (job performance), the degree of cooperative behavior with other workers (organizational citizenship), the presence at or temporary absence from work (absenteeism), and the permanent presence at or severance from a particular job (turnover). This review deliberately examines behavior and its antecedents and consequences, without focusing on affective variables like satisfaction or organizational commitment. I think it is important for the field to reemphasize behavior.

The variables affecting organizational behaviors fall into three major classes:

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ability to do the job, motivation to do the job, and external factors that facilitate or constrain doing the job.

Regarding the first set of variables, the emphasis in traditional industrial psychology has been on the individual's ability to do specific tasks. Over the years, measures of skills and abilities have been substantially refined. Recent research on validity generalization suggests that a small cluster of ability measures are associated with job performance over a relatively broad range of jobs (Pearlman, Schmidt, & Hunter, 1980). Developments in utility analysis (e.g., Boudreau & Berger, 1985) have enabled us to calculate the expected benefit of a valid selection scheme in a variety of organizational situations, such as high or low turnover. The importance of skills and abilities must be remembered as a continuing subtext to what follows.

The second set of variables concerns the motivation for behavior. These variables include the intrapersonal concepts of intention, cognition (sense of efficacy and performance-reward expectancies), and values. This set of variables also includes factors expected to have an impact on motivation, such as leadership behavior, feedback of performance, the design of jobs, and organizational and group norms. (The last two variables are beyond the scope of this article.) These behavioral choices include choosing performance levels, whether or not to be absent, and whether or not to quit work.

The third set of variables also has an impact on behavior. It consists of extrinsic factors that either limit a person's behavioral choices or make it difficult or impossible for him or her to achieve desired goals (e.g., lack of resources). Where these limits are well known to the individual, they may be incorporated into cognitions about self-efficacy. However, in the early stages of employment, the individual may be unaware of these constraints, and performance will therefore be a function of whether these constraints are present as well as being a function of ability and motivation.

This review of the organizational behavior literature focuses on the second and third classes of variables: those directly affecting an individual's choice and those constraining that choice. I will deal first with the issue of choice. Because choices are undertaken during an ongoing stream of behavior, the results of previous choices and interpretations or of attributions for those results are important subthemes[1] in the discussion that follows.

Motivation

My focus on motivation theory is deliberate. Over the past few years, one of the most exciting research developments has been the considerable degree of integration achieved among the major theories of motivation: expectancy theory (Vroom, 1964), goal setting theory (Locke, Shaw, Saari, & Latham, 1981), and achievement theory (e.g., Weiner, 1972). This rapprochement has been based to a large extent on the social learning theory developed by Bandura (1977) and articulated most recently by Weiner (1985; see also Garland, 1985). This approach

[1] I am indebted to the anonymous reviewers for encouraging me to develop this.

suggests that goal setting has its main effects on motivation through the performer's pride or shame in performance and his or her sense of efficacy or feeling that he or she can function at the desired level of performance.

A careful distinction must be drawn between the concept of expectancy (central to expectancy theory) and that of self-efficacy (central to social learning theory). The difference lies in their referents (Locke, Bobko, & Motowidlo, in press). Expectancy has as its referent a particular effort/performance combination (i.e., the probability of successfully reaching a particular goal with a specific level of effort). Self-efficacy has a rather broader referent: the probability of reaching a set of goals (A, A + X, A + 2X, A-X, A-2X) with a particular level of effort. Thus, self-efficacy and expectancy can be related in quite different ways to goal difficulty. By definition, harder goals result in lower expectancies, but may result in higher sense of self-efficacy if the increase in perceived probability of reaching A-2X and A-X outweighs the reduced probabilities of reaching A, A + X, and A + 2X.

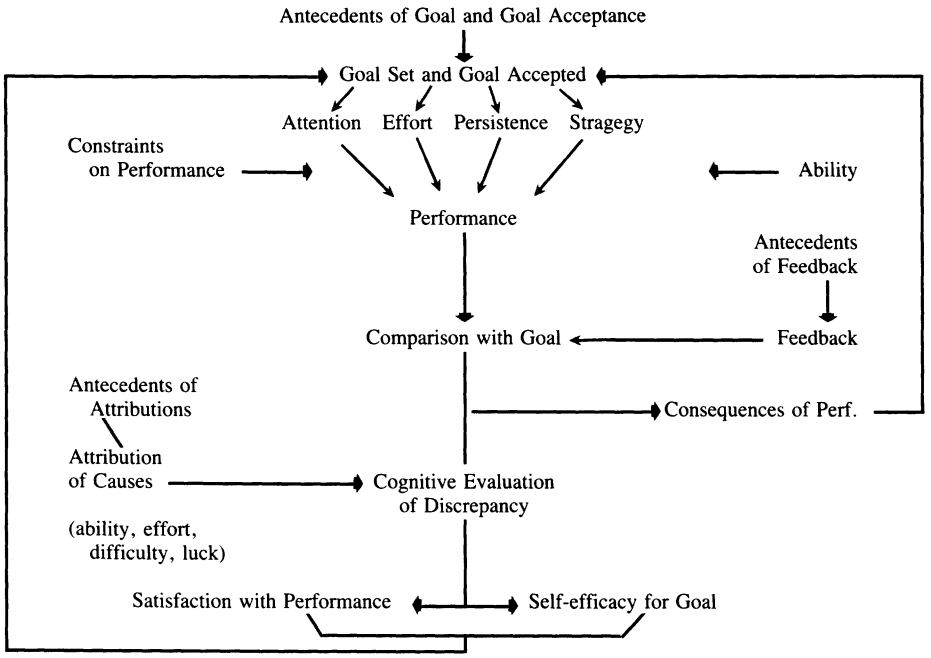
A skeleton of this model of motivation[2] is presented in Figure 1. The model shows an ongoing and cyclical process of setting and achieving (or failing to achieve) goals. Slightly different processes are thought to occur in the initial stages, where a naive person chooses a goal, and subsequent stages where goals are chosen with some knowledge of past performance on the task. Space limitations preclude full treatment of this subject.

An overview of Figure 1 suggests that individual behavior is influenced by the goals that a person chooses or accepts. Initially, goals are accepted on the basis of past experiences (the antecedents of goal choice and acceptance). These goals direct and energize behavior. Behavior results in some level of performance. The actual level attained will depend on ability and the presence or absence of job constraints. If the individual is provided with performance feedback, he or she will compare his or her performance with the original goal. Others, making similar comparisons, or comparisons with their own expectations of the individual, may provide rewards and punishments (the consequences of performance). Simultaneously, the individual is trying to make sense of why any goal/performance discrepancy exists. Several personal and organizational factors affect the kinds of attributions made. These attributions then affect the person's satisfaction with the present outcome and sense of efficacy for future performance. These feed forward, together with the consequences of the earlier performance, to affect the antecedents of goal choice and acceptance for future tasks.

In the first stage, the individual comes to a new task. A goal is set (assigned, self-chosen, or chosen participatively) and accepted. Without acceptance, goals have little or no impact on subsequent behavior. Locke et al. (1981) have suggested that the accepted goal activates four mechanisms: (a) directing attention to relevant aspects of the task, (b) mobilizing effort, (c) generating persistence in behavior, and (d) developing strategies for effective performance. These variables seem to have expectancy theory connotations. Expectancy theory variables may be implicated in the choice of goals. For example, Naylor and Ilgen (1984) be-

[2]My intellectual debt to the developers of goal theory, expectancy theory, and attribution/achievement theory is obvious.

Figure 1
Expanded Model (With Attributions) of Bandura's View of the Goal Setting Process.



lieve that the main effect of goal setting is on the belief that the supervisor will evaluate a particular performance level positively, a part of the performance reward probability. If a difficult goal is set, the individual knows that only very high performance will be positively evaluated and rewarded. Setting an easy goal means that almost any level of performance will be positively evaluated.

Having difficult specific goals is hypothesized to increase each of the motivational and performance mechanisms identified by Locke et al. (1981). These result in performance for the duration of the task. In laboratory studies, duration is typically brief and circumscribed; in field settings, duration is typically open-ended. When the task is completed, final feedback[3] is provided and the individual compares performance against the initial goal. It is at this stage that the major attributional processes occur (Weiner, 1972). When the individual compares performance against a goal or standard, there are two possible outcomes: success or failure, although these may differ in degree. Although these outcomes may elicit immediate feelings of pleasure or distress (Weiner, 1985), they may also elicit a search for causes. Why did the success or failure occur? Was it due to ability or

[3]In addition to this feedback on completion of the task (appraisal feedback), intermediate feedback (referent feedback; Greller & Herold, 1975) may occur during the performing of the task. This intermediate feedback provides cues to the individual about how well he or she is doing with respect to the goal. Ashford and Cummings (1983) have discussed the conditions under which this type of feedback is sought. On receiving this information, the individual interprets it and may choose to redirect his or her energies, develop new strategies, or increase the amount of effort put into the task. This increase in effort has been demonstrated in a study by Matsui, Okada, and Inoshita (1983). Setting intermediate goals as steps in a long-range task (Bandura & Schunk, 1981; Campion & Lord, 1982) would also have the same effect, especially on those people with low tolerance for uncertainty.

lack of ability, to task simplicity or difficulty? Or was it due to effort or lack of effort, or to good or bad luck? Any of these factors could be implicated as causes of the task outcomes. Which one the individual selects has broad implications for his or her affective reaction to the outcome, sense of efficacy for future task performance, and subsequent goal level.

Typically, people increase their goals after a success (Locke, Frederick, Lee, & Bobko, 1984) and lower their goals after a failure. Weiner (1972) has shown that these typical shifts occur only when particular kinds of attributions are made. Table 1 shows the relationships among success and failure and different attributions for success and failure. It also shows the relationship of attributions to (a) the affective reaction to the task outcome, (b) the individual's sense of efficacy that he or she can achieve in the future, and (c) the resultant change in goal or level of aspiration. For example, attributing success to luck results in the person's satisfaction, sense of efficacy, and the new goal level chosen remaining unchanged from the previous levels. This is the end of the first cycle for the naive actor. The new goal set and accepted becomes the impetus for a new cycle: goal setting, performance, feedback, comparison, and attribution, followed by changes in satisfaction, efficacy, and goal level.

Some evidence in support of this model is beginning to be assembled. Locke, Frederick, Buckner, and Bobko (1984) found that prior success was associated with increased self-efficacy, and that self-efficacy was, after controlling for ability and goal level, associated with subsequent performance. Similar results were found by Chacko and McElroy (1983), Locke, Frederick, Lee, and Bobko (1984), Garland (1984), and Thomas and Ward (1983). For managers trying to improve performance, the most interesting situation occurs when a person falls short of goal achievement and feels dissatisfaction, yet retains a sense of efficacy. Does this occur frequently or rarely in real-world situations? Bandura and Cervone (in press) have provided some relevant data: After severe failure to meet a goal, 25% of their subjects retained a high sense of efficacy, and this number rose to 40% when the failure was slight. Those who were dissatisfied with their performance, maintained their self-efficacy, and maintained or increased their goal exerted greater effort in subsequent performance. However, Matsui, Okada, and

Table 1

Attribution Process and Hypothesized Outcomes

Performance: Better Than Goal				
Attribution	Luck	Effort	Easy task	Ability
Impact on Evaluation	0	+	0	+
Impact on Efficacy	0	0	+	+
Resultant Goal Change	0	+	+	+ + +
Performance: Worse Than Goal				
Attribution	Luck	Lack of Effort	Difficult Task	Lack of Ability
Impact on Evaluation	0	0/-	0/-	-
Impact on Efficacy	0	0	-	-
Resultant Goal Change	0	0	-	---

Inoshita (1983) found that increased effort was exerted even though the subjects did not expect to reach their goal.

One issue needing investigation is the problem of assessing the effects of multiple goals on performance. One of the functions of goal setting is the directive function: What is the impact of setting goals in several different performance facets? We know little about this situation, which is the one closest to work in real-life settings.

The four main types of variables implicated in the motivational model are the antecedents of goals and goal acceptance, the antecedents of feedback, the antecedents of attributions, and the consequences of performance. Through these four sets of variables, organizations and their managers can have an impact on individuals' choices and performance.

Antecedents of Goals and Goal Acceptance

There are two ways of looking at goal choice. The first is the view that the goal chosen is the one which the individual finds most easily accessible. In other words, any information that the individual receives about the appropriate level of performance will be seized upon and used as the goal. The acceptance of such a goal would be virtually automatic. Some evidence for such a view (and for the subsequent effects on efficacy) has been provided by Cervone and Peake (1986). They asked subjects whether they thought they could generate 4 or 18 solutions in a problem-solving task. The group receiving the higher figure showed greater self-efficacy and greater persistence. The researchers' instruction itself implied to the naive subject that that particular performance level was feasible, and subjects acted as though this were the case. It seems that this process would predominate for a novel task.

The second perspective on the choice and acceptance of goals takes an expectancy theory approach. The wording in this version of the theory is slightly different from the usual formulations of expectancy theory, but the basic structure of the theory and its essential within-person-choice nature is retained. The theory can be expressed by the following set of equations:

$$
\begin{aligned}
M_a &= IVA_a + E1_a\{IVB_a + \text{Sum}\,(E2_{ai} \times EV_i),\\
M_b &= IVA_b + E1_b\{IVB_b + \text{Sum}\,(E2_{bi} \times EV_i),\\
&\;\;\vdots \qquad\quad \vdots \qquad\quad \vdots \qquad\quad \vdots\\
M_n &= IVA_n + E1_n\{IVB_n + \text{Sum}\,(E2_{ni} \times EV_i).
\end{aligned}
$$

$M_a\ldots_n$ are the motivational forces associated with goals $_a\ldots_n$; $IVA_a\ldots_n$ is the anticipated satisfaction associated with working at a level so as to achieve goals $_a\ldots_n$; $EI_a\ldots_n$ is the expectancy or perceived probability that the individual can attain goal $_a\ldots_n$; $IVB_a\ldots_n$ is the anticipated satisfaction that the individual expects to gain from attaining goals $_a\ldots_n$; EV_i are the anticipated satisfactions associated with extrinsic rewards (compensation, promotion, time off, etc.); and $E2_{ai}$ is the set of probabilities that extrinsic reward will follow as a consequence of achieving goal $_a$. The process is similar for $E2_{bi}$ and $E2_{ni}$. Thus, the choice among these

goals will depend upon the relative strengths of each of these components. The individual will choose the goal with the highest motivational force.

In recent years, there has been little testing of expectancy theory predictions, except in job-choice situations. This is because of the difficulty of providing precise referents for the within-individual choice made in a work context, and also because of problems with measurement (see Schwab, Gottlieb-Olian, & Heneman, 1979). Ilgen, Nebecker, and Pritchard (1981) have provided useful measures (attractiveness measures for valence and frequency measures for expectancies); Sussman and Vecchio (1985) have shown that we need to measure several different conditional probabilities for each equation. The use of several goals as the referents in the expectancy theory equations will provide a more precise set of choices than is usual in expectancy theory research on motivation.[4]

Even with novel tasks, the major factor affecting goal choice is prior experience with similar tasks (Campion & Lord, 1982). However, using the expectancy view of the other antecedents of goals, it becomes quite easy to specify the factors under the manager's control that contribute to the goal level set by the individual. In the first place, leadership behaviors like the structuring of activity, support, achievement-oriented leadership, and contingent reward and punishment will have the effects specified by the path-goal theory of leadership (see House and Mitchell, 1974, for details). A longitudinal study by Seers and Graen (1984) failed to find the interactions predicted by the path-goal theory, but did find hypothesized main effects on performance for leadership behavior and job characteristics. In a more relevant study, Rakestraw and Weiss (1981) have shown that modeling of performance levels will affect the goal level chosen. Bass (1985), building upon the ideas of Burns (1978) and House (1977), has proposed that we pay attention to the ability of leaders to affect the needs, desires, and goals of subordinates. He has argued that these processes will have the greatest impact upon subordinate choice of performance level. In his preliminary research, Bass found strong positive correlations between leader behaviors (such as developing and communicating a vision and a sense of purpose, giving individual consideration to subordinates, and providing intellectual stimulation) and performance ratings of subordinates. Further research along these lines is to be welcomed. Note, however, that leaders may well have different relationships with different subordinates, a point reemphasized by Scandura and Graen's (1984) exemplary longitudinal study of a management training program and Vecchio and Godbel's (1984) study of a branch bank organization.[5]

Job complexity (Hackman & Oldham, 1976) may also have an impact on the component variables of the expectancy model: IV_A, E_1, and so forth (Evans, Kig-

[4]The major remaining weakness in expectancy theory is the problem of identifying the individual's set of valences and assessing their stability over a set of decisions. Some of the retrospective sense-making processes identified by Staw (1976) may result in augmentation of the set of valences to include needs for justification. Tracking of valence shifts over time is essential in future research.

[5]The major threat to the idea that leaders affect subordinate motivation comes from the work of Phillips and his colleagues (Larson, Lingle, & Scerbo, 1984; Phillips, 1984), who found in laboratory studies that subjects develop schema or prototypes of effective and ineffective leaders, which affect their descriptions of leaders (see Gioia & Sims, 1985, for a contrary view). In drawing implications from this type of research, great care must be taken to distinguish between studies examining differences between leaders and nonleaders and those examining differences between effective and ineffective leaders.

gundu, & House, 1979; Schwab & Cummings, 1976). Recent work has continued to look at the direct effects of job design on performance and satisfaction rather than at intervening motivation variables.[6] In a review of 30 empirical studies, Kopelman (1986) found that job redesign activities (usually, increasing job complexity) increased productivity by 6%. In 21 of these studies, work quality (usually indexed by error rates) increased 28%. More important, the role of increased feedback was marked: When feedback was improved, quantity increased 17%, quality 35%; when feedback was unchanged, improvements were much lower (quantity 0%, quality 13%).

Suggesting that job characteristics affect performance and satisfaction through motivation allows integration of the disparate findings from the social construction school (Salancik & Pfeffer, 1978). Both the objective characteristics of the job and social cues from others can affect the valencies and expectancies of the model. Early (1986) found source credibility an important factor in goal acceptance. Vance and Biddle (1985) discovered that social cues affected attitudes only when they were introduced early in the job incumbent's experience. On the other hand, Sandelands and Larson (1985) found that task characteristics had an impact on attitudes only if the individual was involved in the task and had time to reflect upon the task experience.

Kiggundu's (1983) extension of job design theory to include initiated (to others) and received (from others) task interdependence was premised on the motivational model. However, more supportive results for initiated interdependence suggest that received interdependence might well be treated as a job constraint. Recent work on expanding the domain of job design (e.g., Campion & Thayer, 1985) is discussed later, as it seems most relevant to factors affecting constraints on behavior rather than to motivation.

The main antecedent of goal acceptance seems to be authority (but see Early, 1986, for the impact of legitimacy). People tend to accept the goals given to them. In laboratory studies (Erez & Zidion, 1984; Locke, Frederick, Buckner, & Bobko, 1984), subjects will accept virtually any goal. This may be due to the novelty of the task or the demand characteristics of the experiment. The situation in field studies is different: Goal acceptance is dependent on whether or not the individual has participated in setting the goal. The effects of participation on goal acceptance are mixed (see Locke et al., 1981, pp. 137-139, for a review). The meta-analytic approach (Mento, 1984; Tubbs, 1984) holds that the effect of participative decision making on performance is stronger in field settings than in laboratory settings. However, this approach does not control for goal difficulty: Participative decision making results in the setting of more difficult goals. Moreover, participative decision making may result in the development of more complex strategies for dealing with the task (e.g., Latham & Saari, 1979); such strategies

[6]The recent work attempting to examine the differing effects of technology and job characteristics seems to fit in well with the present model and especially with the suggestions of Schwab and Cummings (1976). Brass (1985) found that more complex tasks had higher uncertainty (i.e., lower effort-performance links) and opposite relationships with satisfaction and performance. On the other hand, Pierce, Dunham, and Cummings (1984) found that the main sources of satisfaction and performance were job design (autonomy and skill variety) and technology (degree of machine or procedural control): More complexity and lower control were implicated with higher performance and satisfaction.

have been shown to increase task performance (Locke, Frederick, Buckner, & Bobko, 1984).

The individual's reason for accepting a goal set by or with the supervisor may also contribute to the mixed results of participative decision making. Did subordinates in the participative condition accept the goal because they had influence in the process, or because the supervisor had legitimate power? Did people in the nonparticipative condition accept the goal because of the supervisor's legitimate power, or because of liking for the supervisor or for the supervisor's expertise? In either condition, acceptance due to legitimacy would result in lower commitment to the goals than acceptance due to referent or expert power. Further research should explore in more detail the subordinate's acceptance of the goal. This exploration could be guided by the idea that acceptance could be a function of the superior's power base. Schriesheim and his associates (Podsakoff & Schriesheim, 1985) are working on the developing of improved measures for these constructs.

The second factor affecting acceptance is goal difficulty. People are generally more likely to accept easy goals, although those with high need for achievement seek goals of intermediate difficulty.

Feedback and Its Antecedents

By feedback we mean objective data about job performance. The evaluative aspects are discussed in the section on the consequences of performance, although from some sources data and evaluation are inextricably intertwined.

Sources of feedback include the supervisor, the job, and other people. Scholars are interested in what triggers such feedback or leads the performer to seek it out. The first source of feedback is the job itself. Early work by Greller and Herold (1975) showed how important this is to the individual (see also Herold & Parsons, 1985, for new measures of feedback). The instrumentation by Hackman and Oldham (1976) also indicates how well the job provides feedback to the individual performer. I suggest, along with Taylor, Fisher, and Ilgen (1984) and Ashford and Cummings (1983), that observation of this kind of feedback is highest when there is a discrepancy between goal and performance. However, a large negative discrepancy may also trigger a search for self-protecting attributional information (Ashford & Cummings, 1983).

The second source of feedback is the supervisor. Larson (1984) developed a rather complex model identifying the conditions under which a supervisor is likely to provide feedback to a subordinate. First, feedback is likely to be given if the performance is salient to the supervisor (differs drastically from the norm, occurs under the supervisor's eye, or is related to desirable or important projects for the supervisor). Second, whether or not feedback is given, and the kind of feedback given, depend on the attributions made by the supervisor about whether or not the subordinate is responsible for the behavior (Green & Mitchell, 1979) (the only person doing the task, the availability of resources, and attributions about the causes of the behavior). Attributions to luck or task difficulty will minimize the occurrence of negative or positive feedback. Third, the supervisor's anticipation of negative subordinate reactions (lowered performance, complaints) may

mute the feedback. In addition, the more negative the feedback, the less likely it is to be given and the more likely it is to be distorted or delayed. This process may be more likely to occur when subordinates and supervisor share a mutually rewarding relationship, although it is under such conditions that we would expect negative feedback to be most effective in improving performance (Arvey & Ivancevich, 1980). Finally, supervisors are more likely to provide performance feedback to their subordinates when their own tasks or rewards are contingent on the subordinates' effective performance. Similarly, the norms and expectations of management and peers affects the frequency of feedback. The same factors influence the feedback-giving behavior of co-workers.

Co-workers are the third source of feedback. People compare their own performance with that of others, or seek information directly from them. The less similar co-workers' tasks are, the more difficult it is to gain comparable information and the less likely that co-workers will be used as sources. Similarly, the less supportive peers are, the less likely they will be sought as sources of feedback (Ashford & Cummings, 1983).

Finally, feedback does not always automatically come to the individual. Ashford and Cummings (1983) have fully discussed the conditions (personal and situational) under which the search for feedback occurs. One of the more important implications of their study is the idea that task failure stimulates the search for additional information. Feedback may involve a two-stage process. First, performance information is provided or sought. Next, if this feedback is negative or surprising (Hastie, 1984), the individual may seek additional information in order to develop attributions that will protect her/his self-esteem or at least help in understanding the cause of his/her behavior. People often experience conflict between wanting diagnostic feedback about the real causes of their behavior and wanting feedback that will protect their self-esteem. Whether or not people search for protective feedback is not well understood. We could speculate, following Ashford and Cummings (1983), that some form of utility analysis is followed by individuals. They will accept feedback that is functional for the attainment of their personal goals.

The work of Liden and Mitchell (1985) has supported this view. They examined peoples' preferences about feedback based on the type of attributions that the feedback allowed them to make. They found that following failure, feedback permitting an external, unstable attribution was more accepted. This means that people are likely to look for, be attentive to, or construct cues that permit this attribution, and failure would be less likely to result in dissatisfaction or reduced efficacy. Unchanged motivation or a reduction in effort on the next occasion could occur.

The work of Taylor et al. (1984) has nicely complemented that of Larson (1984). They focused on individual reactions to feedback. They pointed to the differential effects of feedback due to (a) the different uses the subordinate makes of feedback during the early and late stages of familiarity with the task, (b) the way in which feedback is processed (consciously or unconsciously), and (c) the credibility and fairness of the feedback. Recent empirical studies have shown that

feedback and communication are associated with individual and group performance (Chhokar & Wallin, 1984; Penley & Hawkins, 1985; Snyder & Morris, 1984).

Antecedents of Attributions

The first factor affecting attributions is the performance level itself. People tend to attribute success to the internal factors (ability and effort) and failure to the external factors of task characteristics or luck (Chacko & McElroy, 1983; Weiner, 1972). These attributions and their subsequent effects on motivation can be affected by the saliency of each of these factors. If attention is drawn to one or another, the typical attribution process can be altered. It is here, perhaps, that other people's comments on the nature of the task and similarity of performance to their own may affect attributions and hence satisfaction, efficacy, and choice of the next goal.

Second, people with a high initial sense of efficacy, or people with a history of success at similar tasks, are more likely to attribute success to ability and effort and failure to lack of effort or bad luck (Chacko & McElroy, 1983). Similar attribution patterns were found for those high in need for achievement (Weiner, 1972). Chacko, Stone, & Brief (1979) have suggested that participative decision making reduces the extent to which successful performance is attributed to internal factors, because of the alternative salient explanation that success was facilitated by manipulating the goal at the outset. Chacko and McElroy (1983) found support for this in that fewer effort attributions and more attributions to lack of task difficulty were made, even though tasks in the participative situation were as difficult as those in the assigned condition.

Finally, the nature of the feedback provided to the individual can affect attributions. Liden and Mitchell's (1985) manipulation of feedback in the laboratory shows that supervisors can manipulate feedback to encourage internal or external attributions. Because persistence following failure is enhanced if the subordinate attributes failure to lack of effort or luck, supervisors should provide this type of feedback whenever possible.

Consequences of Performance

The feedback that an individual receives from his/her superior may simply describe the level of performance achieved. In many instances, however, it is accompanied by reward or punishment or discipline. The performance reward beliefs that the individual has in anticipating action are built up from her/his own experiences and from observation of others. When good performance is followed by reward (in the individual's terms), strong positive reward expectancies are developed; when good performance is ignored, weak performance reward beliefs are developed. In the former case, motivation and subsequent performance will be high. Evidence for this view is provided by the multiorganizational study of Podsakoff, Todor, Grover, & Huber (1984). They explored the effects of contingent and noncontingent reward and punishment on employee performance and satisfaction. They found that a subordinate's description of the leader's contin-

gent reward was positively associated with supervisors' ratings of performance as well as with a number of satisfaction dimensions (supervisor, advancement, work itself, co-workers, pay). Noncontingent punishment was negatively related to performance, supervisor satisfaction, co-worker satisfaction and pay satisfaction; noncontingent reward was negatively related to satisfaction with work; and contingent punishment was unrelated to any of the dependent variables. Subsequent analyses were performed to examine whether or not a variety of personal, task, and organizational variables moderated the effects of reward and punishment. Very few consistent moderators were found, in line with our theoretical expectation.

In a large-scale field study, Beyer and Trice (1984) investigated the conditions under which supervisors used discipline and its effects in changing unsatisfactory work performance. Supervisors were more likely to use extreme methods (verbal coaching, verbal threat or punishment, written warnings, suspension, leaving, or dismissal) when the performance problem was major. Supervisors who viewed the union as influential tended to use informal threats and written warnings less. Supervisors with more felt authority were more punitive. Contrary to expectation, supervisors with larger spans of control used the milder forms of discipline: verbal coaching and verbal threat. Arvey, Davis, and Nelson (1984) found that disciplinary style (timing and harshness) and consistency were associated with respondents' satisfaction with the supervisor and with the disciplinary system. Lack of trust in the system has negative consequences for future motivation.

The Effect of Job Constraints on Performance

One major focus of recent literature on organizational behavior stems from the idea, formalized by Peters and O'Connor (1980), that task performance in organizations is greatly influenced by organizational constraints on the availability of a variety of needed resources. They suggested that job performance would be higher and that the impact of other factors (difficult goals, leadership style, selection) would be strong only when resources were available for the employee to get the job done.

Peters and O'Connor (1980) identified eight typical constraints in their initial study: (lack of) information; equipment and materials; money; help from others; task ability (although this is really an internal factor); time; and work environment. Some of these factors are similar to aspects of role conflict and overload. Both laboratory and field researchers (e.g., O'Connor et al., 1984) have found support for these hypotheses, including relationships with satisfaction.

The implications of the situational constraints model are far reaching. The model suggests that *any* hypothesized relationship in the organizational sciences may be attenuated sharply in conditions of high situational constraint. Support has been found for the inhibiting effect in goal setting (Peters, Chassie, Lindholm, O'Connor, & Kline, 1982) and for the predictive validity of a clerical test (Peters, Fisher, & O'Connor, 1982), but not for the task characteristics theory (Phillips & Freedman, 1984).

Further research in this area might focus on two issues. First, what organiza-

tional factors or practices would lead to the absence or presence of inhibiting factors? I suggest the following: (a) Organization/environment fit should result in the individual receiving appropriate information; (b) a supervisor with high upward and lateral influence should reduce the inhibitors due to lack of tools and so forth; (c) longer tenure for the individual should improve her/his ability to obtain appropriate information and resources and aid the development of firm-specific skills; (d) group cohesion would enable the individual to get help from within her/his own work group; (e) task-related interdependencies would affect whether or not help from outside groups was crucial for the focal person's performance. As the individual's own ability to acquire resources would increase with tenure, the hypothesized effects of the resources model may apply only in the early stages of a person's job experience.

Second, under what conditions do inhibiting factors get incorporated into the individual's cognitions about effort-performance relationships? If these factors affect motivation directly, they will not have a moderating effect on the motivation-performance relationship. Freedman and Phillips (1985) found some relevant data. They showed that people with internal locus of control were less affected by constraints than were externals. The former group did not exhibit reduced motivation or task satisfaction after task completion, even though performance was negatively affected by constraints.

This view of constraints can be usefully extended by examining the recent literature on job design. Campion and Thayer (1985), Stone and Guetal (1985), and Taber, Beehr, and Walsh (1985) suggest that the Hackman and Oldham (1976) dimensions are insufficient to capture the complexity of real jobs. In particular, they do not include the physical requirements of jobs, which could be considered additional constraints upon task performance.

The most ambitious attempt to expand our understanding of the necessary job dimensions has been that of Campion and Thayer (1985). They drew upon four different disciplines for their measures of job characteristics. In addition to the typical organizational psychology variables hypothesized to affect motivation, they included variables drawn from industrial engineering (13 indicators, such as task simplification, repetition, motion economy, and idle time); work physiology (18 indicators, such as seating, tool design, effort, endurance, and noise); and perceptual and motor skills (23 indicators, such as lighting, control and display identification, control layout, warning devices, and written instructions). They examined the correlations between these variables and a variety of outcome variables such as efficiency, satisfaction (self-ratings of satisfaction and intrinsic motivation and supervisor ratings of performance), efficiency (percentage of those who could perform a job, training time, idle time), reliability (error proneness, overload, mental fatigue), and comfort (effort, fatigue, physical problems). Unfortunately, these dependent variables are rather carelessly named, appear to be conceptually heterogeneous, and are slightly contaminated with variables from the job characteristics set, so these findings should be treated with some caution.

Campion and Thayer (1985) also found two canonical variates: (a) A composite of motor skills, engineering, and a lack of organizational psychology and bi-

ological factors correlated highly with efficiency, reliability, and an absence of satisfaction and comfort; and (b) a composite of biological factors, motor skills, and engineering correlated highly with comfort, reliability, and efficiency. For the reasons stated earlier, I am most uncertain about the implications of these results. My suggestion is that the engineering and biological components be considered job constraints and that the motor skills aspects be viewed as contributions to ability. Both moderate effort-performance links and also directly affect performance (for simplicity, these direct effects are not shown in Figure 1).

Finally, factors such as role conflict, role ambiguity, and experienced stress would all affect the extent to which goals and intentions can be translated into accomplishment.

Other Choice Situations: Turnover and Absenteeism

The choice model that I have articulated concerning behaviors within the firm can be and has been applied to choices that the individual makes about leaving her or his current firm and/or choices about temporary absence from work. I will not treat these issues here, except to note that new directions in turnover research (based on an examination of how labor market factors affect turnover) have been suggested by Hulin, Rosnowski, and Hachiya (1985), and that Goodman and his associates (1983) have provided a most thorough treatment of absenteeism. They have examined alternatives to the choice model proposed here (e.g., a dynamics of action model, Fichman, 1983), as well as measurement issues and the antecedents and consequences of absence. In addition, turnover and absence research must consider the effects on choice of the climate and strategic stance of the organization concerning turnover and absence (e.g., Nicholson & Johns, 1985), the expectations of the work group and of the individual's friends and relatives (e.g., Hom, Griffeth, & Sellaro, 1984; Sheridan, 1985), and the individual's prior commitments to the organization in terms of firm-specific skills and knowledge (Rusbult & Farrell, 1983; Werbel & Gould, 1984). Finally, success at work and individual attributions of the causes of success or failure may influence absence or decisions to quit (Parsons, Herold, & Leatherwood, 1985).

Conclusions

My review has been very selective, but has been guided by a complex model of motivation. I believe that the careful use of this model on a within-person-choice basis has powerful potential for understanding most of the behaviors of individuals within organizations. I am impressed that new variables are being considered in goal setting, turnover, and leadership. Clearly, effective behavior of individuals in organizations is multifaceted. Just as researchers studying performance appraisal have developed multiattribute criteria, analysts of organizational behavior need to work toward motivation models that incorporate a mix of behaviors. Steps are being taken to identify additional relevant behaviors (e.g., organizational citizenship and helping, Smith, Organ, & Near, 1983). We need much more precision in our analysis of relevant behaviors from which the indi-

vidual can choose. Work testing this model or its parts should be preceded by careful job analysis.

I am impressed with the power of meta-analysis. It has been used in a variety of areas: job design (Loher, Noe, Moeller, & Fitzgerald, 1985); turnover (McEvoy & Cascio, 1985; Steel & Ovalle, 1984); and absenteeism (Hackett & Guion, 1985; Scott & Taylor, 1985). In some cases, disquieting differences in findings have emerged as a result of differential coverage of the literature.[7] I look forward to the day when sufficient correlations have been aggregated so that powerful tests of this complex model can be undertaken.

In a number of fields (e.g., turnover, Sheridan, 1985) cusp catastrophe models are being used to predict the dependent variable. Such models include complex interactions between, and power terms of, the independent variables. These models should be tested in some sort of hierarchical fashion, so that (a) we examine the improvement of the more complex model over a simple linear model; (b) we take account of Cohen's (1978) dictum that "partialled products are interactions, partialled powers are curve components"; and (c) we control for potential scaling effects (Arnold & Evans, 1979). In addition, before engaging in such complex analyses, we should note the severe constraints on the scaling, reliability, and validity of the measures used (Busemeyer & Jones, 1983; Evans, 1985).

Finally, there is considerable concern for the low variance explained in most studies of organizational behavior. One reason may be that insistence on between-individual analyses results in considerable underestimation of the variance explained. On the other hand, Abelson (1985), in his amusing analysis of the effects of a batter's skill in determining his success at bat, has suggested that this concern may be misplaced. Abelson has shown that simply examining the amount of variance explained does not tell the whole story. He has estimated that the proportion of variance explained in success at bat by the batter's skill is about 0.3%. Nevertheless, the cumulative effects of skill differentials over a season and over a team are substantial, although the possibility of an illusion of control effect should not be discounted. The similarity of the batter's position to situations studied in organizational behavior is notable because of the cumulative nature of the impact of organizational interventions. Just as the baseball player with a modest edge in skill will have superior performance over a season, so the individual who sets difficult goals will have cumulative high performance over a long time period. These ideas are also reflected in Weick's notions of small wins (Weick, 1984). By achieving incremental goals and many of them in sequence, the nature of the organization (i.e., its level of effectiveness) can be changed.

This also implies that managerial persistence in pursuit of some overall plan is essential. The research on persistence has focused on its dysfunctional aspects.

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[7]There are two meta-analyses examining the correlates of job satisfaction and absenteeism. Hackett and Guion (1985) found an average correlation of .09, but Scott and Taylor (1985) found an average correlation of .18. This discrepancy is associated with the coverage of the literature by the two groups. Although that of Hackett and Guion is broader, their sample is dominated by the work of Nicholson. On the other hand, Scott and Taylor include nine studies not included by Hackett and Guion. This illustrates the dangers inherent in meta-analysis, in which the output is only as good as the studies included in the analysis. In presenting meta-analyses, authors should carefully identify their criteria for inclusion and list the studies excluded.

It is time for researchers to heed the call of Peters and Waterman (1982) and examine the functional effects of such persistence.

The implications of motivational research for management are clear. The manager is a diagnostician in the other aspects of his or her job (e.g., in making a financial investment decision), and has to be a diagnostician when trying to improve performance. The manager has to find out what aspects of motivation are missing and work on replacing them. These could include: setting difficult goals; setting comprehensive goals; helping people reach their goals; ensuring that people can reach their goals; boosting, not destroying, confidence; developing an ideology of goal attainment; rewarding high performance due to effort; punishing sustained poor performance due to lack of effort; coaching, if poor performance is due to lack of ability; reinforcing attributions held by subordinates that failure is due to lack of effort; reinforcing attributions held by subordinates that success is due to ability; removing barriers to achievement; and seeking small wins.

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